of Dialogues 220

H. H. Kreider M. D.
Philadelphia

Annual Life

Insurance

Lecture 1st

Animal Life. Life consists in the power of resisting heat cold & putrefaction
Life does not consist in sensation motion or thought this is proven by freezing a catfish & leaving the fish in that state for some time. no motion sensation or thought did this animal possess
The fresh egg resists congelation 7½ minutes longer than any other. an egg that is a second time frozen does not resist congelation 7½ minute longer than the fresh one. an egg at 15° becomes fluid at 29°. The blood possesses life which is Dr Hunters theory. which is correct as may be proven by several experiments. from the blood solids are produced. the blood after being once frozen congeals sooner a second time. because the vital principle remains debilitated. Life may be preserved without any peculiar power. I employ the term power, instead of capacity because it has the power of self preservation.

Sympathy. I divide Sympathy into. Universal continuous & contiguous. Universal Sympathy I believe seldom if ever occurs. Continuous, as for instance the puncture of a small needle the nervous system Sympathizes.

Contiguous as for instance applying snuff to the Schneidenian membrane the lacrymal & lond sympathizes will be immediately thrown into action & discharge the offending matter.
Remote Sympathy under the division of continuous as pain in the shoulder from a remote effect of the liver. also a stone in one of the kidneys produces pain on both sides & also at the glans penis. Hectic fever does not result from absorption of pus, but is the consequence of sympathy. by overloading the stomach with a heavy supper, the stomach & brain sympathize by producing Incubus & other nervous affections. Dr Physick had a patient who had an inflamation of the stomach as appeared on dessection. She had no apparent symptoms but pain in the foot & leg, but it was found that the stomach was inflamed & black matter was found as in yellow fever. Dr Dorsey says that 2 diseases can exist in the system at the same time. for Instance the cow & small pox. but the small pox will not proceed when the system is affected with measles. Dr Hunter says two diseases cannot exist in the system at the same time. one superceeds the other though there have been instances to the contrary. the Modus operandi is by sympathy alone Medicines occasion temporary derangements thereby creating a new action

Lecture 2nd

Materia Medica comprehends not only those medicines which are used in diseases, but also in health as preventatives of disease.
The diseases in this country require particular attention to diet & regimen. I shall use the term alimentaria. I shall divide this into animal & vegetable. The vegetable is simple mild & wholesome. It is a singular fact that certain vegetables which are agreeable to one are poisonous to another. for instance cicuta or hemlock, whereas a very small quantity would destroy man. goats can subsist on Stramonium without injury which would prove detrimental to man. a question has long been agitated whether man was born to live on a vegetable or animal diet. Man may suddenly be deprived of either without injury. Carnivorous animals may gradually be habituated to a vegetable food. Dr. Stark lived 14 days & gained 4 lbs on oil & flour. vegetable food is certainly more healthy than any other & particularly in some certain diseases. A Troop of Soldiers subsisted for a number of days upon G. Arabic. Lime water & milk are sometimes given to dyspeptic patients

Sometimes the Patient rejects it and it is then found that the milk becomes curdle by the acid in the Stomach, which is in abundance. It is much better to combine lime water with mucilage of G. Arabic. —
I shall now briefly speak of bread. —
Leaven & Unleavened I allow there is no difference but in some different cases unleavened bread is better than leavened and vice versa. In dyspeptic patients prohibit fresh bread & order their state. In China where the inhabitants subsist upon a vegetable diet, their diseases are milder. & their Patients recover sooner from surgical operations, & in Calcutta the same result takes place. It is ascertained that the chyle contains much Sacharine matter, the Oil also contains nourishment as has been taught by Barlow Cullen & others.

Lecture 3.

In febrile cases you ought to allow your Patients but bread & butter, as toast water unfermented bread is much harder to digest than fermented. but when it can be digested it is much better. In Scotland 9/10 of the inhabitants live upon unfermented bread & there are not healthier People on earth. The sailors derive no material effect by exchanging unfermented for fermented bread. Whereas fermented bread

is easy of digestion, it is healthie & more nourishing. there is nothing so hard of digestion as Dumplings, & the under crust of pies. RYE (Rye bread) this articles resembles wheat in many of its properties, but contains more Saccharine matter. It would have been a happy thing for man if Rye had never been used (I allude to its being made into ardent Spirit) Rye bread is a very good diet in costiveness, being of a laxative nature. Rye mush will generally cure prolapsus ani in children Doctor Physick has cured many of prolapsus ani with rye mush Sugar, & Barley this is generally made into barley water which is commonly used in inflamatory diseases, but if the inflamation is too acute it is certainly injurious. RICE. As a valuable article it is not so liable to undergo an acescent fermentation. therefore we always give it when acescency is to be prohibited. It ought to be well boiled otherwise it is hard of digestion I have cured many bowel complaints by confining my patients to Rice & milk In Dyspepsia I think Rice is unwholesome. I know of no articles that are more nutritious than Rice in health. Gentlemen you must be cooks as well as Physicians

Buckwheat Is not unwholesome if there is not too large a quantity of butter. It ought not to be given in dyspepsia as it will aggravate the disease

Corn (Indian) Green corn is flatulent & hard of digestion, though Dr Barton supposed it the most nutritious of all. the Indians wast their corn in ashes **Sago**. Is the pith of Lias circinalis, is readily soluble in boiling water forms a nutritious jelly for convalescents. the Women are generally in the habit of adding to Gill of wine and some cinnamon to it, which ought to be prohibited In bowel complaints a diet of Sago is very serviceable. **Tapioca** Is procured from a plant of S. America prepared from the root of the plant you will find 2 hours necessary for it to dissolve you will therefore be on your guard with respect to boiling it forms a nutritious jelly for convalescents but very hard of digestion. **Arrow Root.** agrees with the last mentioned. It is to be boiled in as much water, & will form it into a jelly. It is the custom to boil it in water and acid milk, in cholera particularly it ought not to be given as the milk becomes coagulated by the acid in the stomach. It an excellent diet for convalescents.—

Lecture 4

Fruit. **APPLES.** contain acid & saccharine matter. they excite the secretions & keep the bowels open. they are not nourishing. In Gout they are hurtful because they increase acidity. **GRAPES.** according to Spalanzani, pass out of the bowels undigested. The juice in Scrophula however is very useful. In Colic &c they are prohibited because they run into fermentation. the pulp of the Melon & orange are hard of digestion but the juice is very useful **PLUMS.** made into jelly are of harder digestion than quinces. Raspberry & Crab apple jellys are also hard of digestion **Roasted APPLES** are not nourishing, but grateful to the stomach do away the sensation of hunger are useful in habitual costiveness. **CUCUMBER.** So hard of digestion I have known spasms to occur from eating them **CHERRIES.** I have known the several spasms & Colics to occur from eating them, dissections have shown that the cherries are collected in balls. Doct. Cullen has also known death to occur from swallowing Plum stones. Dr Physick has known death to ensue from the collected matter by its presence.

An Emetic and afterwards Castor Oil, is the best treatment. When grapes are used in Dysentery the juice is to be given. **FIGS. Prunes** and **Raisins** are useful in habitual costiveness. **Cabbage** Is hard of digestion. **Radish.** & Stems of Plants are flatulent **Carrots.** are very Nutritious. — **Potatoes.** Contain a large quantity of farinaceous matter, are agreeable to the patient. In gout bilious fever &c these may be used, but in dysentery they come away undigested they are best adapted to chronic cases where they may be used. **Animal Diet. Pork & Lamb** are of harder digestion than beef or veal. — they are to be prohibited in inflamatory diseases, & a vegetable diet substituted — **Mutton.** the older this is, the better, ought to be 5 years old before the animal is killed **Pork.** Is of very difficult solution in the stomach, & is therefore injurious to persons who lead a sedentary life. **Venison.** Is a useful article for convalescents and is easier of digestion than all other either. smoked or fresh **Birds.** those that feed upon insects are used generally. **Turkey.** this is nourishing & easy of digestion, but ought to be full grown. the **Chicken.** when roasted is not so good When old are very hard of digestion the patient ought not resort to them

Eggs. are nourishing & easily digested. if boiled ~~Soft~~ or used raw. eggs & oysters may be allowed after all diseases, to convalescents, but when they are boiled hard they are very hard of solution in the stomach. the white of an egg boiled & dried becomes exceedingly hard even to scratch glass. Eggs of the duck & goose have less grateful flavours, than of the chicken. an egg should only be boiled 2½ minutes. the yolk is not easily digested eggs with flour are of difficult solution and ought to be prohibited to patients. **Oysters** are of easy digestion, but the crust of oysters ought ~~not~~ to be allowed. In Typhoid pleurisy, eggs with brandy been & have been used this preparation is easily digested is nutritious & stimulating, the eggs must be fresh i.e. before incipient putrefaction takes place In Typhoid pleurisy where the stomach is very irritable, the yolk of eggs given every 2 hours has been found useful, but when brandy was joined the patient had to reject it. Eggs with wine & brandy are useful.

Fish. Catfish. This is supposed to be harder of digestion than the rock & Perch. the eel is hard of digestion. Fish diet is less strengthening than an animal diet. oysters are in Health perfection here than in Europe (U. States) are nourishing & ought to be allowed first after a vegetable diet the hard tendinous part should be cut away.

Stewed oysters are of harder digestion than stewed
Dr Physick recommends steeping bread into the juice
of oysters. **Clams.** are of harder digestion
than oysters, but the belly (middle part) of the
clam is easier of digestion **Crabs.** are of easier
digestion than Lobsters **Lobsters.** are of hard
digestion I have known colic to ensue —
Turtle. (green) the soup is of easy digestion
and resembles chicken broth. **Milk.** (cow's
milk) the milk from the cow is divided
into 3 parts. 1 the oily, 2 the coagulable
& 3 the watery part. The fresh cows milk
is nourishing, the milk is coagulated in
the stomach by the gastric liquor, milk
is of easier digestion in youth, than in ad-
vanced age. In venereal patients, with a
great many others, who could not be cured
by mercury were ordered to desist from
all medicine and live upon a diet of
milk & bread, and were cured —

Lecture 6

Milk. Dr Cullen approves of milk, as in
correcting the fluids, of acidity. in dens. venna
In Cancer I have known a Lady who had a
cancer in her breast which was so painful
that she could not sleep without large doses
of opium & she was relieved of pain by a milk
diet; milk is beneficial, to relieve pain and

and should be given, in Phthisis Pulmonalis without weakness, which is very much recommended. but should not be given in the inflamatory stage of the disease. the whey is given alone, as it is generally too nourishing. For Phthisis, cream consists of oil curd & whey the 2 latter are separated in churning. the oil that runs out of old cheese is good for ulcers in the nose, (the oil I mean that runs out of toasted cheese) a patient in the Penn's Hospital in the venereal ward who had an obstinate Diarrhoea, was cured by a diet of cheese, Rennet, & milk. are good in many diseases. but in Phthisis, milk is too nourishing. boiled milk consists of whey chiefly, and has been recommended in consumption and great debility wine whey, is made of wine & milk in proportion of 1/2 of the former to 1/2 of the latter you boil the wine & milk together and take up the curd without breaking. strain it through linnen cloth. as the curd is very inatable & ought not to be given. It is stimulating & nourishing. Milk punch is not good as it coagulates in the stomach, (the milk) as the curd is very inatable. but to old drunkards it is very good, as those affected with ebriania a Potu. Dr Barton considered calcareous spar (earth) nourishing, Oxygen &c

Turnips. In a raw state are easy of digestion **Geese & Ducks** should be eaten before rancidity takes place. In Dyspepsia smoked beef is not to be given.

Fish may be allowed when you wish to give a stimulus. In cholera Infantum still bran is not to be given, when it is given it must be used with caution. It should be administered in all cases of debility. Dr Dorsey recommends broiled bran very highly in warm weather.

Beef Soup. take 5 parts beef 3 parts water put it on a slow fire & boil it until it is dissolved, then skim off the fat & boil it again. the way to know when it is sufficiently boiled is to drop some on a cold surface. if it congeals it is good & well boiled. a small quantity of pepper & salt should be added. Beef should be cut in slices & boiling water poured over it, to extract the blood before it is put over the fire to boil. Chicken broth ought not to be given in inflammatory diseases as it often proves fatal by bringing on black vomit.

Lecture 7th

Calf's foot jelly. to a weak stomach is hard of digestion. Dr Physick's soup is prepared in the following manner, take 3 potatoes a slice of bread & 2 onions in 3 pints to 1 qt of water, a little salt & pepper may be added. this stomach will bear this very well. & answers better than any thing I have used. a piece of chicken may be put in to disguise it as chicken broth, & is less stimulating

Fryed beef with flour particularly ought to be prohibited to dyspeptic patients. Vinegar increases the appetite in small quantities. Capsicum is useful in Gouty habits. Is a stimulant externally & internally. as it is a useful remedy we will not speak of it here **Drinks.** Cyder is an innocent drink in its pure state. In Gout it is hurtful. In Colic, spasms of the bowels & stomach it is hurtful. In drunkards, where there is much debility of the stomach from the use of ardent spirits & tremors
Humulus Lupulus there is something in the hop which is stimulating, an infusion of hops is the best remedy
we will resume it again in its proper place
Porter. is very good but ale is often adulterated. Porter is better & has a tonic effect. they are both flatulent. In low fevers they may be given **Wines.** Contain acids, alcohol, Sugar &c the mucilage is most nutritious. the Teneriffe approach as nearest to a Madeira. Champaign I have given with success when the others failed. In Typhus fever - the patient not being accustomed to this stimulus. Its effects are quicker than the others but less durable. **Port.** Is most frequently adulterated. it contains an astringent quality & is therefore used in Diarrhoea. I shall resume it hereafter.

French Wines. are inferior to the others. **Gin Rum & Whiskey.** Contain about 53 parts alcohol 2 or parts more than half

In children arrow root made into paste with water is much more nourishing (and not producing producing acidity in the stomach) than flour & milk Old people cannot bear hunger long they may therefore frequently take food.

Lecture 8

We have concluded the history of materia & it remains for me to apply them to disease.

Diseases of inflamatory action either general or local, the object in these cases is to keep the heart & arteries free from any thing stimulating In Phrenitis I allow nothing but water, with toasted bread Patients have been known to live a fortnight & 3 weeks, upon this single diet. In acc inflamatory diseases this may be allowed. **Pinade** which is bread boiled in water, with sugar is another article, but I prefer the former in Phrenitis, next to this is barley water but it not so nourishing. Mucilage &c

Chocolate. Is nourishing contains oil & mucilage, it is apt to become rancid & is said to rise on the stomach, this may be remedied in the following

Manner, suffer the chocolate to cool and the oil will rise upon the surface in a congealed state, skim it off & boil it again it never rises upon the stomach when this is done. **Eggs**. boiled soft are not to be used during the acute stage of an inflammatory disease, oily birds fowls &c may be allowed to convalescents, excepting geese and ducks. In the septic state of the system, all articles of animal food, with spices &c. may be used especially in Typhoid Pleurisy, which has so frequently occurred in the U. S. Wine whey, milk punch, and eggs beat up with brandy have been used with success, the stomach is not to be overloaded but the patient may repeat them frequently, so as not to oppress the stomach. In **Scurvy**. all animal food is injurious, a vegetable diet alone is to be used. Symptoms of Scurvy. Lassitude weakness, laborious breathing palpitation of the heart, eyes yellow bloated countenance, Gums, swelled - Gums, with smarting pain, bleeding of the gums upon the slightest irritation, fœtid breath, the teeth loose, pain severest at night; but when a sweat breaks out the pain is relieved, & Cutis anserina when dysentery

now takes place, it generally proves fa-
tal. Oranges, and Lemons are among our
best remedies. If the patient does not die
in 48 hours he generally recovers. Dr Smith
used raw potatoes with vinegar, with great
success in the British navy, but in dysentery
this is to be prohibited, and all acescent
articles are to be laid aside, animal food
is too stimulating in the first stage of
dysentery. Sago. G. Arabic. & Tapioca. have
cured dysentery without any other rem-
-edy, except a purge with castor oil —
Chickens are to be allowed before animal
food. In Cholera the same remarks are
necessary (or applicable) big great attention
to diet, as nothing is to be given that is
irritable to the stomach I have general-
-ly used G. Arabic with sugar. In Gouty
habit a vegetable diet has often done
good. In Phthisis a vegetable diet is also
very useful. In Asthma & Cancer. It appea-
-ses pain & suspends it. Temperature of diet
is also to be observed, very hot is injurious
producing dyspepsia. hot tea is very
injurious to females producing dyspepsia
Ice Cream & Cold Water are injurious to the
body when warm, It has occasioned death
In Hemorrhages nothing warm is to be taken

Cold drinks, & a cold diet alone is to be used
Coffee with sugar & cream is more nourishing
than without them. Coffee resists fermenta-
tion it has also often relieved head aches
it counteracts the effects of Opium. dimi-
nishing nervous sensations. In Dyspeptic
Symptoms, it is sometimes useful. In peri-
-odical Asthma. It is useful not always
in the mode of action, but after the de-
gree of action **Stimulants**. are medicines
which excite the action of the moving fi-
bre **Sedatives**. act directly without pro-
-ducing evacuations.

Lecture 9

There is no such thing as a direct Sed-
ative, by passing a Bougie into the Ure-
thra paleness & sometimes fainting en-
sues. **Odours**. produce the same effect,
but these cannot act except by stimu-
lating the Urethra & membrane of the
nose. How do medicines operate? on
the solids or by entering the circulation?
I answer that the latter is not the case
since the most powerful medicines
effect no change in the chyle or blood
by the continued use of some articles, a grad
ual change is produced, as is proved by
the colour of madder in bones & by the

experiments of Dr Bostock, who discovered soda in the urine of a patient, who had made free use of it as a medicine. They cannot however introduce active remedies into the circulation. although we can affect the fluids by the long use of others. as alum operates particularly upon the parotid glands, it was formerly supposed to have been carried to these parts through the circulation, but the advocates for this opinion, by attempting to avoid one difficulty, have fallen into another, for it is as easy to explain the effects on the salivary glands, supposing the medicine in the stomach, as in the bloodvessels. I confess myself unable to explain the modus operandi of any remedy. I will engage when I know how one acts, to explain how they all act. In every case we must admit the agency of that power, denominated Sympathy. even if medicines are carried through the circulation

I confess myself unable to explain to you how medicines produce their effects. & now proceed to speak of their effects. some writers consider all medicines as stimulants which they suppose have a stimulant action on particular systems, that is

So great advantage in this, although it is true that some diseases & some medicinal articles act especially upon particular parts of the system. I have divided all remedies into 2 classes, evacuants & stimulants under the first class I have also included anthelmintics and Sialagogues.

Evacuantia.	Stimulantia.
Bloodletting	Tonics
Emetics	Astringents
Cathartics	Narcotics
Sialagogues	Antispasmodics
Diuretics	
Diaphoretics	
Anthelmintics	
Expectorants	

This an arrangement in itself unimportant will I hope assist you in acquiring a knowledge of Materia Medica. I shall proceed to speak of **BLOODLETTING** as it is the most direct & powerful evacuant we possess & should consider it an unpardonable omission, if I passed it over in silence. It is a convenient remedy and during the fluctuation of medical theories, it has always been considered a most powerful agent in the hands of the practitioner. Bostatius who was as you all know the famous

Sanguedo wrote a treatise on this subject recommending it in all cases, while others have run to the opposite extreme. Louis 13th, King of France during the last 10 months of his life, was bled 47 times purged 215 & glystered 230 times. It is a natural remedy where as Dr Rush expressed it. performs it. by habit bloodletting loses its efficacy, and by habit the use of it is made necessary. after injuries of the head it is important to bleed very largely, in order to prevent extravasation & inflammation of the brain. when some customary evacuation has been suppressed, it often becomes necessary. In this country a prejudice prevails against bleeding old & very young infants, yet experience has found it quite as necessary & important in these cases as any. In Switzerland old people are frequently & regularly bled, & the health they enjoy is a proof of its utility. In fever it is indispensable. & its most prominent effect is to reduce the inordinate action of the heart and arteries, & in other words to subdue or reduce the violence of the symptoms the extent to which it may be carried in cases of disease is wonderful. In a case of apoplexy Dr Physick took 90 ℥.

at a single bleeding. In injuries of the head I have bled five times a day, nearly to the extent of a Quart, which in a similar case took 320 ounces of blood in 20 days. Haller relates a case where 22 lbs were lost at once. this would be incredible were it not for the gradual loss, giving time for a new supply. when venesection is much used, the cure or exasperation is proportionably less. During the yellow fever. Drs Rush and Physick were accused of bleeding until the blood no longer stained the linen, this although not exactly true will shew you the effects of the operations

It produces a diminution of diseased or morbid action, and in Remittent fever should be employed, when the action is most violent. I have repeatedly cured intermittent fevers by venesection and blisters after tonics had failed. In continued fevers, venesection may be used at all times Dr Cullen by condemning it in Synochus and Typhus has misled thousands, who have from the fear of debility, deprived their patients of this necessary & important remedy. In acute diseases I would never

refuse to bleed, for fear of debility, because in fever bloodletting is certainly the most powerful tonic we possess. If the system is weak after the evacuation it would have been weaker without it. In this Country Dr. Cullens directions have been productive of a vast deal of mischief, but his practice applied to our diseases, is productive of the most pernicious consequences.

Lecture 11th

In 1793 and for several successive years our City was visited by a most fatal Epidemic. The dissensions which occurred are probably known to you all. It is not my intention to disturb their ashes wishing they should be consigned to quiet and forgetfulness. at this period it was my fortune to study and acquire the Elements of Medicine, and to receive impressions which will never be forgotten that rule which from its importance has justly been denominated Golden, was at this time most strangely inculcated and Physicians were taught the importance of adapting their remedies according to the state of the system.

In this disease yellow fever must be employed boldly, & repeated according to the violence of the symptoms. On the third day the pulse was frequent tense full or depressed, and required the use of the lancet. In all these cases venesection must be repeated, as long as the pulse rises from febrile action, repeated until the violent symptoms subside. Dr Rush said that venesection when not carried to the requisite extent was prejudicial. I will now state to you some cases in which bloodletting is improper. It is so when the leading symptoms are debility. The late epidemic was said to be an instance of this kind. The cases which fell under my own observation were ushered in with inflamatory symptoms, & here I unhesitatingly resorted to the lancet. To refrain from bloodletting because debility was to ensue, was a most ridiculous practice which deserves nothing but continual reproach. There was however in this disease a deceptive pulse, was easily compressed and unlike the usual inflamatory pulse of Pleuritic patients. Dr Rush forbids venesection, when the viscera and brain are engorged with blood. In both cases, the pulse is feeble, & says the Doctor

the loss of a few ounces of blood would prove fatal. after the pulse is effected by friction and gentle stimulants, blood may be taken with advantage. these remarks on the engorged system are valuable, but I do not think the theory is correct. stagnation in the bloodvessels has never been demonstrated, and should it take place gangrene would be the inevitable result. this however furnishes no objection to the practice of Dr Rush, which experience has confirmed as most useful. 3 It is improper in the conclusion on advanced stages, of inflamatory diseases. I am sorry that Dr Rush should say it was improper to resort to it in malignant fevers if not called in before the third day. What? Refuse to bleed with a tense and active pulse because three days have elapsed. In many cases the pulse requires the use of the remedy even after many days have elapsed. Bleed therefore gentlemen in every stage of inflamatory fever when the symptoms demand it. The idea that we are to repair from venesection because debility is expected, or after 3 days have elapsed, should be opposed. as a general rule however it may not be

necessary in the advanced stages of diseases
In the concluding stage of a paroxysm of
intermittent or remittent fever, venesection
is improper. In accidents, though venese-
ction is generally indicated, yet in gunshot or
punctured wounds, in hot weather it may
not be safe, in those cases as you will learn
from the Professor of Surgery, the importance
of a proper position. In the same disease
& accidents which in temperate persons re-
quire bloodletting, but when they occur
to intemperate people, we are under the
necessity of using liberal stimulating sub-
stances, as in delirium a potu. If however
general inflamatory symptoms supervene
venesection is proper. after large abscesses
an opened inflamation sometimes ensues
it calls for the use of the lancet, as
much as if an abscess had not taken
place. whenever an effusion of serum
or pus produces reaction bleed. In recit-
ing the cases in which venesection is re-
quired. it must in all critical or doubt-
full cases, direct your attention to the
pulse, in such cases see the operation
performed yourself, because you cannot
judge before hand the quantity which
will be necessary. In the class of diseases

which Cullen has denominated, Phlegmasia, venesection is the most important remedy. after removing the remote causes the first thing is to bleed, in order to destroy the diseases & restore the healthy action. the effects in these cases are 1st Pain is immediately relieved, 2 Morbid heat, 3 disordered state of the functions restored. In acute pneumonia you have an example of this effect, 4 it prevents termination by gangrene or death. 5 It prevents the effusion of serous fluids, which destroy organization. prevents hemorrhagic effusion in the brain, & Coma. I might extend this catalogue to a much greater length I will here mention but two

the system for the operation of other remedies, you will often have occasion to verify remarks of Dr Rush on this point 1. It removes local congestion of vessels and restores them to their natural functions these are not the observations of an enthusiast, but they are such as every days experience, will convince you at all times. In local inflammation, venesection is carried to a greater extent, than in general fever. I confess that I have my doubts respecting the existence of fever, without

local inflammation, having always found it to exist in Bilious & Typhus fevers, but these are cases of general fever (if any such exist) In hernia humoralis I have bled daily for a week. I after that time bled only once in 48 hours, which produced a speedy recovery. I proceed now to speak of venesection in particular inflamatory diseases. In Opthalmia venesectio general and local are the principal remedies. the vessels must be emptied by the continued use of this and other remedies. I was lately called in a case where melted brass was thrown into the eye, and the tunica conjunctiva, was saved from the effects of the heat (produced by the brass) by very liberal & frequent bleeding, and by the constant use of Ice water. the patients vision was relieved. but I am convinced no other remedy would have been successful. I bled as frequently as in bilious fever, and with as much advantage We are directed to seize diseases at time by the forelock to take them in their forming state, in no case is this rule more applicable than in inflamation of the eyes. by a case in the elements of Surgery, you will see how frequently we may be obliged

to repeat this remedy. bleed as long as inflammation continues, & when general venesection is no longer safe resort to local depletion

Phrenitis large and repeated bleedings are here necessary. Cullen recommends opening the carotid artery or jugular vein. In cancer there is no necessity of performing this operation the only precaution which is necessary is that you employ the remedy to a sufficient extent. In Mania I am fully persuaded of the superiority of the treatment introduced by Doctor Rush. Cullen recommends bloodletting Dr Rush enforces its importance & the records of that institution, where his practice was adopted, form its incontestible value

There from 20 to 30 ℥ are to be taken in the fainting errors. Dr Rush recommends performing the operation, while the patient is in an erect posture. If he would be kept in this posture there would be some risque in the remark, but I should prefer the situation in which he is to remain because in that case more blood may be taken without inducing syncope. The remedy is to be used as long as the symptoms indicate

In Mania a Potu profuse sweating was not beneficial the use of depleting remedies. I have used leeches and cupping with some advantage. Emetics were formerly introduced in those cases by Dr Colapso. in the Alms house. I shall speak of this when we treat of emetics

Lecture IIth

Sometimes after an abscess is formed (opened) febrile action ensues, in consequence as Mr Hunter supposes, of the imperfection of the cavity, according to others the admission of air. I believe that both these causes have considerable agency, in the production of inflammation. I mentioned that one advantage from venesection was to prevent disorganization, from the secretion or effusion of coagulable lymph or pus, this direction is particularly important in diseases of the eyes when disorganization is inseparable. I go on to speak of venesection in other diseases. In all inflammations of the thorax and fauces it is useful. In Cynanche Tonsilaris it prevents suppuration and Sedatives if employed early. In Cynanche Maligna the lancet is occasionally required. but as a general rule it is not indicated in this disease

In Cynanche Tracheali it is of immense importance, and should never be neglected even in a young subject — of the blue lips than one month old. If venesection is found difficult to or 15 leeches are to be applied to the throat first immersing them into warm water, as they will do injury otherwise by cold. In Cynanche Parotidea venesection is indicated, & the neglect of it has led to the swelling of the testicle or hernia humoralis

Of all the pyrexia pneumonia is said to require the most liberal use of the lancet. Dr Cullen's directions on this point are very useful, and to them I refer you (Cullen) I have bled 5 times in one day in pleurisy. The disease in this country, requires the more free use of the lancet than in Europe frequently at the first bleeding your patient will not bear the loss of more than 8 ℥. of blood without fainting, yet if you again apply the ligature in 2 hours after, he will be able to lose 15 ℥. Be guided by the state of the system. you will find V. S. more useful the first day, yet be not deterred if 4 days have elapsed, may think

A fortnight has elapsed, without using the remedy, as for the quantity no general rule can be given 16 ℥. being a full bleeding. three a larger, less than 12 ℥. a small one 5 ℥ is generally as much as the patient can bear to lose, after the first four days if pain becomes the urgent symptom, use leeches or cupping but if you wish to relieve difficulty of breathing, open the vein of the arm as it is the most effectual. Study Dr Cullen for directions in this disease. his practice is judicious. In other inflamatory diseases of the chest, not even excepting pulmonary consumption, with muscular debility, bloodletting is proper in the latter case, however we apply leeches to the back or cupping. Hepatitis. venesection is here the most important evacuant we possess.

even in Odontalgia Dr Rush recommends venesection. Mr Hudson our most respectable dentist, advises leeches in tumefaction of the gums.

Gout. Under certain circumstances venesection is the most important remedy. In many cases excruciating pain

Is relieved, when balsams, Opiates &c have been used in vain. Dr Rush has done me service to the faculty, by enumerating the benefits arising from venesection in this disease. **Eruptive Diseases.** Here it is useless for me to particularize the cases in which it is proper. In almost all of them it is proper and you should never refrain from it, for fear of debility, for the disease is more debilitating than the evacuation. In these diseases venesection has only the power of diminishing morbid action, not of changing it. Hemorrhagy which is accompanyed with febrile action, is to be cured by venesection. It might be supposed that hemorrhagy would cure itself, but nature in such cases does not manage judiciously. If hemorrhagy is produced by a local affection, it is cured by venesection. We are to employ it in epistaxis it is often important

I am no advocate for venesection in every case, as it is apt to produce a frequent occurrence of the disease hence other evacuations are to be preferred

Hemoptysis. here venesection must be employed, so as to keep the action of the heart & arteries below the healthy standard

During the discharge, common salt sugar of lead & other remedies are to be used. and the patient is to be kept in bed in a cool room. **Hemorrhoids**. Here local bleeding is necessary, I generally make 6 or 8 small punctures, with the lancet in preference to leeches. they should be made rapidly so as to allow the discharge of blood. **Menorrhagia**. Here venesection is important. this is usually accompanied with febrile symptoms, and we are to judge of the propriety of venesection by the state of the system. Hematemesis. The pulse is an excellent test as of the necessity of bleeding, usually however the discharge is so great that we are obliged to support the patient's strength **Apoplexy**. here bloodletting is the remedy the voluntary motions are destroyed when the action of the heart & arteries continue. It is essential to evacuate largely & rapidly therefore I prefer bleeding my patient in an erect posture. I sometimes open both arms. Every thing retarding the motion of the blood, from the head should be removed. In palsy the cure is to be conducted in the same general rule always attending to the state of the system.

Lecture 12

In many of the "spasms" of Dr Cullen venesection is an important remedy, it ought however, never to be used in tetanus. I state this with confidence having seen it employed in several cases, & always with decided ill effects. In every case where I have seen venesection employed the patient has died. In hot weather & in hot climates, this disease frequently results from wounds, and on this occasion, venesection in these cases is to be used, but cautiously. It is generally safe after wounds in hot weather, to bleed as long as there is febrile action. I have done so in one case in which tetanus & death were the consequences. In a violent fit of hysteria, I have known 2 qts of blood taken away, which produced an immediate cessation, of the convulsions. In Epilepsy it is sometime useful, but the remote causes are so various, that we can give no particular matter of cure. Corea. With Sydenham & Rush venesection was a favorite remedy though Cullen feared an evacuation when we come to purgatives

I shall tell you that it bears evacuations, and is treated successively by the use of purges. I have two general rules to give you, relative to the use of this remedy. Bleed in all difficult cases of expiration & for the relief of pain.— bleed when the pulse indicates it. in Colic. venesection is to be employed it relieves the violent spasms and prepares the system for the operation of other remedies

In bowel complaints the pulse seldom indicates venesection, and here it is to be employed in proportion to the pain & violence of other symptoms. I have said enough respecting this remedy, to show you its importance, and give you some general principles to guide you in the use of it. Remember that it is the most powerful evacuant we possess, having urged you to employ it in a bold manner. I wish you also to remember, that in using it, the better part valour discretion. If you follow the principles I have given you need not fear employing the remedy too far. I know it has been abused and that in the hands of

Ignorant men, it has been injurious, But I also know many, who have been cured by it, of violent malignant fevers, improper venesection the cure of their disease the lingering effects of their disease

Of the use of venesection in Surgery you have some remarks from the Professor. and also the manner of performing it much has been said of opening veins in the proper place. those of the arms are most convenient. and this also answers every purpose. In opening the jugular or carotid arteries, the latter operation ought never to be performed

Topical Bleeding. Scarifications are used in local inflamation. thus we divide the loaded vessels of the adnata with great advantage. The benefit is obvious but the explanation is not so easy as the

In Cynanche Tonsillares. I have often employed it with great success. Cupping this is a favourite remedy in topical inflamation, not however to be employed untill the system is reduced. Blood is taken so gradually, as to prevent Syncope

And hence we often recommend it, & compelled to this evacuation. In Hemicrania and as a to venesection in violent plethora. In cases of a doubtful character it is useful and safe. whether it is useful only evacuation, I cannot say. probably both.

Leeches. are important when cupping would prove too irritating as in of the joints. They can be applied more directly to the part as in Ophthalmia they are less painful

I must ask your attention a few moments to the ridiculous manner of applying them in England 2 or 3 at a time. As far as I have observed 20 leeches draw from 4 to 6 ℥. of blood. the mode of keeping them is pointed out in Copes dispensatory. They are often employed when we wish to bleed children, & where it is not practicable to open a vein. there is an important prejudice against bleeding very young children, which in many cases have proven fatal. They live after accidents & diseases which would destroy adults, & they bear the operation of all medicines better, except salivation, which if excited in very young

children prove fatal. the difficulty of bleeding infants should not deter you, as you will frequently be called to visit them strangling with croup & bleeding will be the best & only remedy. In **Hydrocephalus** and **Convulsions** — here it is important. In short symptoms of disease in children it requires venesection as much as in adults

Emetics. are a second on my list of evacuants. vomiting is sometimes a natural action, and when properly managed is not dangerous. Some have supposed the abdominal muscles principally active in vomiting but this is disproved by a cruel experiment of Mr Heighton, he opened the abdomens of several animals whilst vomiting, & saw the contraction of the muscles of the stomach. In cases where disagreeable medicines have been taken, we frequently see the Oesophagus contract, so as to prevent the repetition of the dose, notwithstanding the patient exerts himself to swallow. In vomiting the stomach & duodenum are principally active, and they have frequently been lacerated by the violent contraction. Darwins theory of vomiting is not correct. as no emetics diminish the energy of the stomach

It is true that the action of the heart and arteries are very much diminished but the same effect is produced by injecting wine into the tunica vaginalis, and no one will say that this injection acts as a sedative. **Emetics:** the operation of this class of remedies, is much affected by peculiarities of constitution. In elephantiasis tis necessary to give very large doses. Ipecac poisons have been taken into the stomach enormous doses are required to produce even a moderate evacuation, My two Predecessors have spoken highly of emetics in fevers they should according to the directions of Dr Hotchkiss be preceded by venesection. The bilious fever, when nausea pain in the head, and discharges of bile are urgent symptoms, emetics are indispensable. It is a portion to order them in in intermittents, to prepare the system for the action of bark. If the system be excited, venesection purges and emetics are to be employed but in milder cases, emetics are beneficial, given just before the paroxysm. Previous to the use of tonics Fordyce combined, Ipecacuhanna. & Tartar emetic

And gave them in the paroxysm, his object was to produce a crysis similar to what takes place in the natural crysis. Emetics often produce redness of the face and turgescence of the vessels of the head, in which cases following Sydenhams directions & premise blood letting, & tis best to give an emetic afterwards, as the blood vessels are more emptied afterwards, (at this time) In Epilepsy they have been found to prevent the accession of the paroxysm. ——

APOPLEXY. I have never seen a case of this disease, so manifestly arising from an affection of the stomach, as to induce me to give emetics, as in these cases I always prefer venesection and cathartics. I was led to this preference by witnessing the fatal termination of a case of apoplexy, in which an emetic produced a rupture, of one of the blood vessels of the brain. But emetics are invaluable in cases of apparent apoplexy, arising from the quality or too great quantity of food taken in to the stomach. I do not consider this as an apoplexy for three reasons. 1st It arises from different causes 2nd absence of

breathing. Low & small pulse, more frequent than in apoplexy. distention of the stomach & bowels, is evident by laying the hands on them. In these cases Emetics are of primary importance first raise the patients head, remove all obstructions to the return of blood from the head, bleed and give an emetic

Hydrocephalus Internus. Dr Chapman considered this a primary affection of the stomach, which requires the use of emetics. I am not convinced that the disease always arises from disorders of the latter viscera. and the cases we have dissected have not led me to the same conclusion. I have always found an effusion in the brain. In an affection of the alimentary canal you will hear from him the best treatment.

Of the use of emetics in fever. I advise you to read Dr Cullens observations. 171 - Section

In acute Rheumatism occurring in marshy countries, Dr Barton recommends Emetics. Dr Chapman has used them in the same cases with advantage. not being conversant with that disease except in the city. I can recommend them only on the authority of my predecessors. —

In chronic Rheumatism small doses to nauseate are useful. Dr Barton recommended emetics in gout especially retrocedent gout. which in his own case he found serviceable. I would not however as a general rule apply them (employ). In diseases of the eyes emetics are sometimes useful but they are not to supercede the use of better remedies of general & local bleeding purging blisters &c leeches &c.

Lecture 18th

In the various affections of the throat emetics are useful more especially in cynanche tonsillaris. Some prescribe an emetic after suppuration has taken place in order to burst the abscess. this is an awkward & unjustifiable practice. If you use the lancet, introduce it with linen wrapt around it leaving about half an inch bare of the point and then introduce it into the swelled tonsil. If there is pus it will be discharged, & if there is none the operation will do no harm, but good. If called upon to say which medicine was most valuable in cynanche trachealis I should place emetics as first on the list when called to a case of croup always take your lancet & emetic tartar. I give the latter in large doses. Dr Chapman gave 15 grs to a child at a single dose. It should be employed in divided doses by which some times the use of this class of remedies. In all diseases commence with active remedies in their early stages.

and this rule is particularly applicable in croup. The disease sometimes extends to the bronchia, & requires copious venesections, sponges of calomel, blisters, & some persevere emetics to evacuate the membrane which is formed in the trachea. There is no use in this, if respiration is impeded it is from other causes. as the membrane never closes the aperture, here far emetics may be of service, in relaxing the spasm. I do not pretend to say. But I am sure that when suffocation occurs, it arises from the spasmodic contraction of the muscles of the glottis, and not, from the membrane I once commenced the operation of tracheotomy on a child who appeared to be in articulo mortis, from suffocation, and in 5 minutes breathing was restored through the glottis, without difficulty. In this case the loss of blood was trifling compared with the previous evacuations, so that I imputed some part of the effect to fear. This is a disease in children which has been treated in too timid a manner. Whenever Practitioners are more bold, with their remedies, the disease will perhaps prove to be less fatal. & vice versa

Lecture 14

In fevers of the Southern States emetics are of no benefit. generally preceded by venesection & cathartics. In chronic emetics are to be given in large doses, & in this manner have proved very useful. they have lately been introduced into medicine by Dr Klapp. In chronic Rotn he gives gr. Tart. Emetic, and states that when the pulse is weak and the patient debilitated, that the patients strength is increased by the use of emetics. when emetics are indicated use them but I have generally employed powerful stimuli, when the symptoms are subsultus tendinum, black tongue weak pulse &c. In Bdiopathic tetanus nauseating doses of emetics are useful, but symptomatic require free use of stimulants especially opium. In the latter disease I never knew evacuations beneficial. on the other hand bleeding or purging has always been attended with an aggravation of the disease. In reducing luxated bones, or hernia, emetics are of great use, particularly where bloodletting is contraindicated. this practice originated with Physick

(with Dr Physick) 16 years ago, and has recently been pronounced as an original improvement by the Surgeons of London. Foreign bodies are frequently lodged in the Oesophagus, which we are unable to dislodge by probing. in a case where peach stones were swallowed they were displaced by ordering the patient to hold in his mouth a solution of Tartar emetic, which produced nausea & relaxation of the oesophagus & excite vomiting although we had no reason to suppose that any portion of the emetic reached the stomach. Biliary & other calculi are frequently dislodged in the same manner for which warm emetics have been prescribed in jaundice. In many affections of the head emetics are very important sick head ache is generally relieved by a emetic. Dr Barton's favorite remedy in these cases was 15 grs of Ipecacuhanna. There is a severe chronic pain of the head which which arises from external injury, but which does not affect the brain Dr Physick has studied this disease for a long time in order to ascertain the best mode of treating it. When I was in London I made enquiries of all the Surgeons in the place concerning it. all of them had seen the affection but could recommend no cure. Dr Physick has found no remedy so useful as doses of emetics, repeated daily for a few days and offer cheat cure in 48 hours —

Puerperal Fever. In this disease the Uterus is in a high state of inflammation & consequently attended

with great danger. Emetics may sometimes be useful, but that they have any specific operation on the peritoneum or uterus I do not believe. Black vomiting sometimes occurs, similar to that which was one of the most dangerous symptoms of yellow fever. The discharges have much the same resemblance, and in a case of puerpal fever with Dr Sams I pursued exactly the same treatment which yellow fever required and with success. viz venesection purges, blisters &c therefore in the use of emetics in this disease observe the same rules which I laid down in speaking of bilious fever and especially if nausea & pain in the back occur an emetic will be useful. In hemorrhages in hemoptysis & uterine hemorrhage small doses of tartar emetic are useful. In bloody urine (Hematuria) Ipecacuanha & opium are of great service. Dr Barton considers the Ipecacuanha a specific in this disease as it did not even nauseate. It has usually been considered as an astringent power. The Opium is an important part of this prescription. In hemia humoralis emetics are sometimes serviceable but they ought always to be combined. With bloodletting emetics are sometimes employed. to discuss buboes I generally employ blisters which have a great effect of absorbing pus. In Dropsy emetics are recommended or useful to promote

Abscess; but there is less reason to believe the
effectual in this than in the preceding disease
& nauseating doses are to be given. Vomiting
is serviceable in dropsy depending upon
obstructions of the liver, or other viscera
and in ascites from intermittents
or leucomata, joined in combination with
calomel. In the repulsive efficacy of emetics
in hydrocele I have no confidence, but
in facile inflammation of the parts, I believe
that an impression upon the alimenta-
ry canal will be more effectual. Mr Rho-
Rhider has lately published a work
to prove that this disease arises from
strictures in the urethra. I have seen
some cases of this kind, and Dr Physick
has always noticed the same in his lec-
tures, but they are comparatively rare
In Idiopathic hydrocele, I employ
no medicine unless there is inflam-
mation, but immediately resort to
the radical cure by injection. In
Dysentery emetics have been used
with success. If emetics have cured
these diseases, I believe it to have
been in those cases, which I consider
as febrile Intermittents, we are to pursue
the same course of treatment, as in other
febrile affections. In one case, I took
10 ℥ blood the first day, and this aided by
purges and blisters saved my patient. In
treating this disease I entirely lose sight of
the bowels considering their affection
secondary to the febrile action which
must be reduced. If nausea or pain in
the back attend this disease emetics are
indicated. In Diarrhoea, when the diges-
tive powers are impaired, producing what is termed

by the vulgar foul stomach, emetics are indicated. In diarrhoea from catarrhal affections small doses of emetics are useful by producing diaphoresis. I always direct my Patients to wear flannel next his skin. In Dyspepsia in small doses of emetics are sometimes useful. In weak stomachs of sedentary habits, marked by the usual symptoms of Dyspepsia Dr Thirsle recommended the repeated use of emetics. In this disease exercise is the proper remedy. I have told you never to prescribe emetics unless in disease. In Rickets it is often necessary to prescribe emetics in the commencement but they should be followed up by the cold bath & tonics &c. Surgeons are often called to restore distorted limbs from Rickets, which is to be done by purging, emetics, cold bath, iron &c. In Fever albus & Chlorosis, emetics are recommended. Tic Doloureux, usually occurs in aged people. I have seen it in people from 40 to 75 years of age. It is a painful attack upon some part of the face sudden and excruciating, usually lasting for a minute, and returning at the distance of an hour, the pain is usually beneath the eye, or malar or temporal bones. Patients describe the pain different, some comparing it to the pricking of needles, others a gun, different, eating talking gentle touch of the bed clothes or of a handkerchief living it on, whilst strong pressure produces no effect.

If the Patient has any teeth they are general=
ly more sensible, but it frequently occurs sep=
arately without any affection of the teeth.
It is different from Rheumatism or ague
in the face, which is sometimes connec=
ted with the face (teeth) and often occurs
as an intermittent. Tooth ache & ague
occur in the early part of life. Tic Do=
loureux in advanced age. It is a local
severe pain unattended by inflamation
and never ends in suppuration. Dr.
Fothergill describes it well but his theo=
ry is false. He attributes it to a can=
cerous quality of the fluids, but the af=
fection is totally unlike cancer. within
a few years many remedies have been
employed, with various success, such
as excision &c. after this the actual
was resorted to. the most cruel ope=
ration which I ever witnessed was that of
this disease. while in Paris I saw
applied to the cheek & set on fire.
so that the patients face was totally hori=
=zed. Dr. Gray and the London Surgeons
have divided the infra orbitary
by which means they often suspend the
disease. which in a short time recurs
or alternately cut away ½ an inch of
the nerve to prevent its reunion. Dr. Phys=
ick having performed this operation twi=
without success, and knowing that the
common remedies are ineffectual resor=
ted to the use of Emetics. He was led to

This by knowing the sympathy between the stomach and other parts and that other painful affections are frequently relieved by powerful impressions made upon the stomach. several cases have occurred which we have treated in this manner with complete success. and if the remedy is as effectual in your hands as it has been in ours, we shall have the satisfaction of removing one of the too long lists of opprobria medicorum.

Lecture 15

At our last lecture I spoke to you of the efficacy of emetics, in several chronic pains of the head by succeeding injuries in that part. I also called your attention to the great efficacy of these remedies in the dolorous. Dr Physick told me that one of his patients continued well (free from pain) for three years. In eruptive diseases emetics are useful. In Exanthematous they are serviceable, on the same principles as in other febrile diseases. But there are several diseases (eruptive) depending on disease of the stomach, as a species of urticaria from

Eating fish. In which case emetics properly administered are the best remedies. The mode of exhibiting them requires care. In poisons give them in prompt and large doses. In hypochondriasis (to be unique) they must be repeated daily and that for a long time. They are not to be given in the advanced state of pregnancy, and for obvious reasons not in hernia, as protrusion will be the consequence, when there is plethora always premise venesection, as a general rule always give them in divided doses, to prevent the bad effects arising from an over dose. When excessive vomiting is produced use opium, sinapisms and blisters. Drinks render the evacuations easier, but the patient is not to drink until the vomiting commences. Large potations are better than small & frequent sippings, and this must be attended to. Warm water or balm tea are as good as any drinks for this purpose. They are not so essential for children as for adults nor would they be willing to drink during the nausea which the emetic

Produces. If a violent operation is desired, or a powerful impression on the system, no drink is to be allowed. Suffer the emetic in such cases, to exert its full power on the stomach. Some have divided emetics into weak as warm water tickling the fauces &c. Into common as Ipecacuhanna, and into the powerful. Dr Duncan divides them into four classes but these subdivisions are useless and serve only to burden your memory. I shall speak first of vegetable emetics, and of them Ipecacuhanna to be placed at the head. Its generic name is cephaeleen. It is a perennial plant not well known, in title within a few years. The thick leathery part of the root is most powerful & our druggists are careful not to purchase those roots which have numerous fibres growing from the. It is sometimes difficult to prescribe the proper dose of an emetic, owing to the great difference in the medicinal properties. Dr Lewis's work of the comparative merits of different

kinds of medicines & Drugs is valu=
able. and for those of you who purchase
your own medicines, it is essential
there are two kinds of Ipecacuhanna
in market, the brown and ash colour=
ed. Practitioners generally prefer
the latter. Dr Cullen supposes the
efficacy of Ipecacuhanna to reside
in the Cortical part of the root
but he is mistaken for the whol of
the root is emetic. the bark how=
ever has double the strength of the
ligneous fibres. wine is an excellent
menstruum to extract the medi=
=cal properties of Ipecacuhanna
which are considered to be of a
resinous quality ℥2. Ipecacuhanna
to 2 pints ~~water~~ (wine) Spirits may
also be employed. vinegar & water
are sometimes used. but the best
mode of administering it is in sub=
stance. Its active properties are of a
volatile nature. on which account
no decoction ought to be employed
and the root ought to be confined
from air in close vessels. I proceed to
speak of the diseases to which Ipecac
is peculiarly adapted

It is not to be used in cases where violent vomiting is desired, it often affects the bowels, does not depend on the laxative quality. In Dysentery it is much used & is valuable. In S. America is considered a specific. Dr Mosely who employed it in the W. Indies, indicates its efficacy in this disease to its action on the skin. He gave from a scruple to 1/2 ℥. and kept his patients in bed, in order to produce diaphoresis. Dr Murray considers it as an antispasmodic, in its effects and by Dr Chapman it is considered useful by reducing arterial action. Its good effects in Dysentery are obtained by giving from 2 to 4 grains every few hours. Dr Barton's favourite cure was 12 grains Ipecacuanha 2 grains opium & 20 grs of prepared chalk, divided into 8 powders & one given every two hours. I have used the above preparation (of Barton) in these cases with success. In Diarrhoea it is as valuable perhaps as in Dysentery. In habitual diarrhoea with sickness at stomach, bitter taste with frequent discharges, 1 or 2 grs Ipecacuanha before rising in the morning, & an opiate at bed time, are said to be useful. In hemorrhagy Ipecacuanha is a valuable remedy. In uterine hemorrhagy keep up with it a constant nausea

and to obtain its full effect, use it with opium. It has been observed that when vomiting is excited, in that discharge it is at first increased. The following prescription is an excellent remedy in this disease. ℞ Vacchanum Saturnini 3 grs

Divided into 4 doses { Opium – 1 to 1½ grs
1 every 2 or 3 hours { Ipecac. 18 grs

In fever ½ gr Ipecac & 10 grs nitre are much used. In Intermittent Dr Thompson found it very useful. another practice is to give 5 grs before the accession of a paroxysm. It has been employed in curing consumption with adhesions in this disease it was much used by Dr Barton & Rush, 1 gr Ipecac & tolu prepared chalk 8 times a day. In dyspepsia 1 gr is useful. it should be given so as not to excite nausea.

In asthma it has been recommended particularly by Dr Dibnside, it is given in doses of from 3 to 5 grs every morning so as to produce ~~vomiting~~ nausea if vomiting is excited, diminish the dose. I might quote many others in favour of this practice. In **Hydrothorax** small doses relieve difficulty of breathing. Dover powder has been found useful in other forms of dropsy.

When poisons are swallowed ½ ʒ Ipecacuan will operate promptly. It is also useful to increase the purgative operating of other remedies, as Jalapa & wine 2 ℈ 4. to 2 ʒ Ipecac. dose 1 ʒ. Infusion. 1 ʒ. to 4 ʒ. water, given in 4 doses. The powder is usually the best mode of giving it. The next article is **Spiræa Trifoliata.** rot. This plant is nearly allied to Ipecac. in its medicine properties. The flowers larger than which the gum is connected, leaves similar. The medicinal properties reside in the root. and the bark is the most efficacious as in Ipecac. It is best cultivated by transplanting the roots. The seeds however will answer & should be sown in the face. This was a favourite remedy of Dr Bailey, but I am not convinced that it is in any respect superior to it. Those who live a distance from the sea shore may find it a convenient substitute. But I consider it the duty of those who can readily obtain Ipecac. to use it. The dose of this remedy of 40 grs. form a material objection to its use. I am unwilling to burden the Materia Medica, with unnecessary substitutes, should this remedy be found in some diseases superior to Ipecac. it will attract a more respectful notice.

Lecture 10

Nicotiana Tabacum. "Possesses emetic powers in a great degree. Has been recommended by my predecessors, where Poisons have been swallowed, but I think the system will be much reduced as in the exhibition of Digitalis. Use in the form of a cataplasm applied to the stomach. **Scilla Maritima.** (sea onion) squill, grows in Spain Sicily & Portugal. That which is found in large inequal black pieces, contains much extraneous matter, & should not be used. That

that which is in plump masses clammy matter
unctuous, is the kind used. In hydrothorax it of
fails, from its being mixed with extraneous mat-
ter. 4 grs in a dry state, are more active than
20 in a recent state. used in hydrothorax.
Cough asthma pulmonary diseases & Epilepsy
are seldom given to vomit but to nauseate.
4 to 6 grs do as emetic pr grs 10 2 in substance
with mine I prefer it. **Mineral Emetics**
Antimony (crude) Is a combination of
sulphur & antimony, a portion of pure an-
timony may combined with an acid & form a
salt. Tart. emetic (now made) or tartarized
antimony, -/R. Crocus of antimony - parts 3
{Super tartrate of Potash — parts - 4
Water — grs - 32.
When boiled a triple salt is formed.
5 grs in 5 tablespoonfuls of water, is given a tea-
spoonful until vomiting is excited. I have
known 44 grs given at once without producing
vomiting. The dose for a child from 2 weeks to
2 months old, is 2 grs dissolved in 16 teaspoons
full of warm water & 1/8 of a gr is given when
cold. for 1 year 1/4 gr. i.e. dissolve 2 grs in
8 ℥ water, & give a teaspoonful every 10 minutes
I had one occasion to give as much as 15 grs at once
to a lady. **Antimonial Wine.** was made of
1 dr of antimony dissolved in wine but this prepa-
ration is now laid aside. Dissolve 40 grs in 2 ℥ j.
water, & 8 ℥ wine. I prefer the watery solution

Lecture 17

Tartrit antimonii. Tartar emetic is found
would not prescribe it before ~~tartar emetic~~
venesection, it ought nearly in every case be
preceded by v.s. Its effects in febrile cases have
been supposed to arise from it exciting nausea.

Dr Hunter places it under the division of diaphoretics, & indeed it may be employed as a diaphoretic Diuretic or expectorant according to the method of administering it. In **Hemorrhages**. It is beneficial when it depends upon febrile symptoms. In common febrile cases I prefer Specac. In small pox it is useful when the eruption is tardy. It prepares the system for the small pox. When I commenced practice I generally combined it with nitre with the idea of its preparing the system for its inspection. In Eruptive Diseases. It is generally employed. In certain eruptive diseases where the eruption depends upon a vitiated state of the stomach as, **Urticaria**. where the diet is fish which causes it in peculiar case an emetic is highly beneficial. In **Urticaria**. the eruptions are pale at first but soon change to a red hue. In **Leprosy & Venereal**. It is a useless remedy in my opinion. Mercury in my hands proved the best. a Solution of Tart. emetic, applied externally to the parts is occasionally found serviceable. In **Dysentery**. Tart. emetic has long been used. But it does not appear to be very decidedly useful. In the cases it is unfavorable. I agree with Dr Chapman in preferring Specac. In **Luxations**. Tart emetic is best. Its primary effects in these cases is to relax the muscles. It is also a very good article in removing foreign substances lodged in the oesophagus and trachea as I have mentioned before. In these cases spasm is superadded to the obstruction. In **Poisons**. Tart emetic is of immense importance. though I prefer a combination of

Tartar Emetic and Sulphate of Zinc.
In Constipation. It may be occasionally requisite by causing relaxation. In these cases drastic purgatives must be resorted to. In Tetanus. In Idiopathic Tetanus it is highly beneficial, but in symptomatic stimulants must be resorted to
In Consumption. an external application to the breast made of common crude potash, and sprinkled with Tartar emetic. The virtues of this cataplasm is by the irritation excited by the Tartar emetic. In Chronic pain of the breast this potash is found to be excellent I now come to the last article **Sulphas Zinci**. this is regarded as a powerful emetic a dose is from 10 to 15 grs. it is peculiarly adapted to those cases where poisons have been swallowed. In these cases the dose must be large as ℥ss. to ℥i.
I gave to a person who took ℥ss of laudanum ℥ss and in this case by irritating the fauces with a feather emesis was produced, and the patient recovered after vomiting three times. —

So far as I have seen I cannot agree with Dr Cullen, that a large dose will prove noxious. a tablespoonfull of bruised Mustard will promote the action of Sulphuric Zinc. I have not employed it extensively. But I prefer it to Ipecacuanha and tartar Emetic. In Pertussis. It is found to be beneficial. In Cynanche Trachealis (Croup) I prefer it to tartar emetic and Ipecac. In Dysentery, when febrile symptoms are apparent use venesection and afterwards Sulphate of Zinc. astringents may also be used if requisite

Pulmonary Complaints

of its use in this disease I have no experience. Tartar emetic and Ipecacuhanna I think deserve a preeminence.

Morely's solution is Zij Sulphas Zinci.

Lecture 15.

Of Emetics. Copper. of the preparations of copper I shall mention only one. The Sulphate or blue vitriol, is a prompt and powerful emetic. Dr Hartshorn of this City uses it when opium has been swallowed I consider it the best remedy in such cases. He has given a scruple at a time. The average dose is from 2 to 5 grains, but I have known half a grain to excite violent vomiting. Dr Simmons recommends it in pulmonary consumption and by him it was employed in doses of from 2 to 20 grains, but with the precaution of dissolving every grain in an ounce of water. Dr Senter also recommends it as an excellent remedy in Phthisis. He gives it with Tartar Emetic or Ipecacuhanna. (usually with the latter) Sulphate of copper and Ipecacuhanna from 7 grains each and he says he restored to health 60 to 70 people labouring under hectic fever with this than with any other remedy. Cullen considers the blue Vitriol as a harsh and unmanageable emetic. I have not found it either harsh or unmanagable but a very uncertain emetic; sometimes in minute doses exciting vomiting; at other times large doses are requisite. It occasions less relaxation, than the antimonial emetics, on which account it may be useful in the feeble state of pulmonary consumption but on that account also it will not be so useful in reducing febrile action. In Croup it is used in the Southern States and in Colica Pictonum it was employed until Morely introduced the use of sulphas Zinci. White vitriol

Dry Vomit is composed of equal parts of tartar emet. and sulphate of copper.

Mercurial Emetics. Calomel frequently proves emetic but turbeth mineral is the only article used to produce this effect, it is a sub sulphate of Mercury of a yellow colour and not very soluble, which will distinguish it from the neutral sulphate. The dose is from 3 to 8 grains, and it sometimes salivates. Cullens observations on the mercurial emetics are correct. We have better emetics and we have better Sialagogues, and therefore when we wish to excite vomiting, I prefer tartar emetic and Ipecacuhanna and for a ptyalism use calomel blue pill or ointment. To have presented you with a larger list of emetics would have given me no trouble, but it is already long enough, Indeed if it had been reduced to 2 articles, Antimony and Ipecacuhanna, the Materia Medica would not suffer any serious loss. I think that he who expunges from the number of remedies one useless article does almost as much good as he who adds to the too long catalogue of remedies or medicines.

Our first class is

Cathartics

They have been variously divided and classed by different authors, but they are of minor importance. Cullen divides them into laxatives and purgatives and this division is as good as any. But it is remarked that most purgatives may be given, so as to prove laxative — and large doses of the Cathartics may be given so as to act as purgatives. Some of the cathartics however are too irritating to be given in this way.

With Magnesia we cannot produce drastic purging. A powerful cathartic first stimulates the stomach, which is evacuated either into the duodenum or by vomiting. It is correct to say that it operates on the whole alimentary canal, the gall bladder and liver being excited into action, the secretion from the mucous glands, and the peristaltic motion of the intestines is greatly augmented. Gripes arise from an inordinate degree of action, which are intended to rid the system of the irritating cause. By purging the action of the bloodvessels is much reduced and this is one of the most powerful evacuants we possess. Dr Cullen thinks they do not take off the phlogistic diathesis of the system. I cannot say why he should think thus, for we certainly possess no remedy equal venesection. So powerful in reducing tension & and activity of the bloodvessels. Do the absorbent purgatives exert a powerful action as is proved by their producing a rapid removal of morbid collections of pus or serum. Their effect is probably sympathetic for bloodletting so as to produce an equal evacuation does not produce the same effect. In my opinion purging acts both by reducing the action of the bloodvessels and by a sympathetic action on the absorbents also.

Like all other remedies Cathartics act or operate by exciting new action, which either suspends morbid excitement or alters it so as to be readily cured. Thus in diseases of the head they are very independent of the evacuation they produce. In mania they are frequently followed by sleep when opium has been given in vain. It has been observed that intense thought in the system ~~was~~ less liable to be affected by this action

Thus Newton and Bonaparte while engaged in intense study, were not affected by the use of purgatives. Cullen says an afflux of fluids to the bowels produces a revulsion from the head, and hence their use in apoplexy! the only explanation I can give is the incompatability of two actions of equal force at the same time

Lecture 19th.

Yesterday commenced with another class viz: Cathartics, I told you that some Physicians give them with the view of promoting absorption. I told you also that they act upon the gall bladder, absorbents, pancreas, spleen &c. and that I consider them next to venesection. Doctor Physick had a patient who when he was in a healthy state, had daily two stools, now if he has a stool before 4 days he becomes affected (much) Cullen relates several cases, in which persons had no evacuation from their intestines, some not in 6. 7. 9. 11. 13. 20. 25. 30. to 45. days, in one 3 Month elapsed without a stool, several in which 2. 3. to. 6 years have elapsed without an evacuation. Doctor Balie relates a case of a shoemaker, who had 2, or 3 evacuations in health, became costive frequently, belching his pulse as high as 78. to 85 all the remedies which were resorted to failed. Blisters and suppositories were also without effect. After dissection, the structure of the sigmoid flexure was found (blow the obstructing) during his last days he could take nothing but a little toast water and wine his stomach was not diseased the peculiar matter was gaumous.

In such a case I would make a puncture above the stricture to evacuate the fæces? — In hernia the intestines are sometimes in a mortified state without any bad effects. to the patient Irregularity of the intestines produces many diseases, as head ache, this disease is often relieved by cathartics

Symptoms when of irregularity. Nausea vertigo Diminution of sight. Dr Physick had a patient in which his vision was entirely lost when in a state of constipation.

Women are of a more costive habit than men, depends upon a debilitated peristaltic motion. In Melancholia, there is a torpid action of the intestines, in this disease large doses are requisite. In comatose affections as in Mania Phrenitis &c large doses must be exercised. Dr Cheyne supposes the torpid action of the intestines in some diseases to arise from a torpid state of the glands. Laxatives as Rhubarb Magnesia Sulphur &c ought in every case precede the drastic cathartics, but when abused they become nearly inert. where the liver is affected and the bile is in a vitiated state Calomel is the cathartic which ought to be used. Salivation is occasionally used in constipation. In colics they are indispensible, I use an injection of 1 pint of starch or mucilage of gum arabic and a tea spoonful of Laudanum or gutta 100. this injection is found highly beneficial in Colics. Colica Pictonum, Costiveness always attends and occasionally precedes it. Dr Cheyne's favorite remedy is Castor oil and Rhubarb. I cannot say much of the benefit of cathartics in this disease, as I have had only ten or twelve cases in my practice, and in those I employed them with advantage.

In febrile affections they are given when any ~~affection~~ vitiated substance is in the stomach as bile and are in such cases highly important laxatives are generally preferred. Dr St George Fordyces book on the use of purgatives in fevers I refer you. In this country practitioners employ them in all fevers. Cathartics are one of the most important remedies in fever.

In Intermittent. They are indicated, the bark may be given after emetics and cathartics were employed. In these diseases the stomach is generally inflamed, and I think it the cause of these diseases. In Yellow Fever, and Bilious Fever, there is generally an inflamation of the stomach similar to Gastritis. In these diseases the stomach is generally inflamed, and I think it the cause of these diseases. In the mild remittent fever, they are often the only remedies necessary. In Continued fever (of Rush etc) they are useful. In Typhus. Dr Hamilton thinks them to be the best remedies adapted to the symptoms, I caution you against the abuse of this class of medicines, in this as in all other diseases always attend to the state of the system, the symptoms of Typhus are

I refer you to Dr Hamiltons work on purgatives

Lecture 20

At my last lecture I told you that fever arose from local inflamation.

In Intermittents cathartics are proper remedies

before the bark is administered. In Typhus, the late professor Barton recommended cathartics. In this disease universally I believe they are highly useful when indicated. In this as in all other diseases attend to the state of the system. Physicians divided at the idea of giving cathartics in this disease were led by an idea of their debilitating the system they suppose the disease arose from debility, which I cannot believe the cathartics will increase by proper management.

In Eruptive diseases purging is an important remedy in these cases.

Small Pox. generally used in the commencement

In Erysipelas. The Professor of Surgery in Univ. of Penn. cathartics are highly useful.

In Scarlatina. Cathartics when indicated are important. A late writer recommended venesection. In this city cathartics have been universally used. When the inflamatory diathesis is apparent use venesection, when the patient is positive use cathartics. Large doses are generally requisite. An Oedomatous state of the body which sometimes occurs, in these cases they are highly useful. In Measles. They have long been recognized as useful. gentle laxatives are frequently serious the pulmonary system, Bloody stools sometimes come on, Cathartics put an immediate stop to them. In Chronic Erysipelas. Place of them are benefited by cathartics In Ophthalmia. They are of great service. venesection cathartics & the antiphlogistic diet are the remedies used. Leeches are of great service in this disease.

In Morbus Coxarius. are highly beneficial sometimes inflamation may be to suppuration. Doctor Physick uses them daily and has generally succeeded in putting a stop to this disease with cream of tartar & Jalap

The limb to be at rest, patients thus treated, are known to become confident. In Rheumatism beneficial. In Chronic Rheumatism, when inflammation appears venesection ought to precede the use of Cathartics. Gout, by the first Physicians was supposed to be a modification of Rheumatism. The causes are quite different. They are different diseases in my opinion. This disease was supposed to be incurable. no disease is incurable. In this disease purging has been too much laid aside. In regular Gout. There is inflammation principally confined to the joints are in such cases highly beneficial. The pain is sometimes transferred to different viscera as Stomach, Lungs and head, generally called retrocedent Gout. In such cases cathartics may sometimes be omitted and venesection resorted to. Cathartics have been known to increase and bring it on when the patient was apparently free from this disease. venesection is far safer than cathartics. In Retrocedent Gout occasionally the feet become swollen in such cases cathartics are beneficial

Variety of specifics have been sold by Empirics for this disease, we have no specific for any disease except Mercury in Syphilis which is the only one

L. Cau Medicinale has been sold as a specific. Its composition is unknown it is generally supposed to be highly beneficial. In Regular Gout it relieves when given in the Evening. The patient is much relieved by it in the morning Sir Joseph Bank was much relieved by it, this Medicine has caused terrible effects, when given in an over dose, it kills immediately, an Irishman who swallowed an over dose, was nearly killed by it, if no aid would have been present death would have been inevitable

Colchicum Autumnale. As an important medicine, this plant deserves your attention Gentlemen. Stoerck proclaimed to the world a specific for the gout (Colchicum Autumnale) or Meadow saffron. Hexandria Trigynia Monopetala bulbous root England 4 oz Colchicum 8 oz sherry or Lisbon wine dose ℥ij. He states that in 40 cases he has found this remedy effectual. It is easy advance that the many experiments have been repeated I can say nothing of the medicinal virtues of the plant, from my own experience nothing can be more contradictory than the statement of Physicians respecting the efficacy of this medicine some representing it as a total inert. Mr Murray of Gottingen says that it is powerful in the affection of Anomaly which cost it. There can be no doubt of its being an active remedy, and as a medicine in Gout, it affords ample room for future investigation. I have exhibited a plate of the engraving.

Lecture 21

Cathartics in all cases of local inflammation as hepatitis, Splenitis, are valuable. Practitioners have made an exception to their use of purgatives when the inflammation is seated in the throat and chest I question the propriety of this distinction I suspect the debilitating effects of a diarrhoea at the close of Phthisis have led to its adoption But I would as soon purge in the angenose affections and even in the early stage of consumption as in any other inflamatory disease even do not for the preference which is properly given to venesection and in all cases it will be found a valuable auxiliary to the depletion of the lancet In what Cullen has denominated Serous Leucorrhoea purging is a very valuable remedy In Apoplexy active and frequently repeated cathartics are important.

They act first by depleting from the arterial Sys-
tem & by producing what is denominated a revul-
sion from the head. And I may add by increasing
the activity of the absorbents. In those cases aris-
ing from disease of the alimentary canal they
are evidently the most useful. Palsy requires
repeating purges. Hydrocephalus Internus,
is an inflammation of the brain terminating in ef-
fusion, it requires venesection and purges again
and again. All dissections which I have seen
(and they have been numerous) evince it to be
a disease of high inflammation. Some venture
to tap a child with this disease through the
fontanel considerable serum was discharged
in a few weeks the operation was repeated, the
symptoms were much relieved by these suc-
cessive operations but eventually died, and I
have found the brain hollow and like the meat
of a cocoa nut. Purges repeated day after
day, form a prominent
successful treatment of this disease. in the most
In Mania & Melancholia. Purges are
much used. In Chorea St. Vith. they are
highly recommended by Hamilton and his
description of the disease, merits your atten-
tion as it goes far to prove the propriety of pur-
ges. Sydenham cured it by venesection and
purges, Hamilton by a continued use of
purges, even to the completion of the cure.
He commenced he says with caution from the
idea that continued depletion would be followed by
debility, but in this country it had long been
an established point that cathartics in diseas
es of the alimentary canal are less debilita-
ting than the which results from the dis-
ease itself. we have always employed active
purges, without fear of debility, whether under
take the cholera by purges must be resolute and
persevering in the practice on his patients.
attendants will interfere with other articles
and bring discredit to the remedy. after solute
ry evacuations take place the regular stimulus of
cathartics will be necessary to prevent a recurrence
of the disease.

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Tonics may perhaps at this time also be useful or necessary and of these I shall speak hereafter

Epilepsy. In this disease the arterial and nervous systems are affected and the bowels are also concerned in it as has been proved very satisfactorily. In the latter case purges alone will effect a cure, but in no other case. Dr Physick has a case of apoplexy from a tumour on the thumb which was cured by extirpating the tumour. with Dr Rush I frankly confess I have no adequate idea of this disease. It is right however to use those remedies which experience has found useful and of those especially when the alimentary canal is diseased, purging is the most important.

Head ache. Here 1st the nervous 2 the arterial system and 3 the alimentary canal are implicated. In the first set the heart and arteries act irregularly, seven frequently producing the second and debility in the stomach or constipation of the bowels produce the third variety of head ache. This affection differs as to the seat of the pain, being sometimes on the forehead occiput over the orbits and over the whole cranium as to the kind of pain being sometimes dull heavy and stupifying, sometimes sharp and lancinating, gnawing and sometimes the sensation of pulsating the sufferers patients say their heads will burst. The pain is intermitting or continual and the head is often sore to the touch. In Chronic nervous headache the extremities are cold the eyes are intolerant of light; vertigo and frequently nausea are symptoms; I have been particular in mentioning these varieties because authors have not bestowed on the subject that attention which it requires. By far the most frequent cause is indigestion, it is also produced by too little sleep, by obstruction of the catamenia; and by blows on the head the first object is to remove the remote causes and vomiting and purging are important remedies. It is necessary to prevent the bowels from constipation.

I have cured chronic head ache by ordering my patients to breakfast and sup on rye mush and milk instead of coffee and tea. Laxatives are generally necessary I use Rhubarb and Magnesia, the latter especially in cases of acidity of the stomach. In obstinate cases leeches repeated daily for weeks are necessary. Sometimes venesection is necessary and in chronic cases cures.— In my own opinion the heart and arteries are affected in all diseases called nervous.

Hysteria. In this disease the heart and arteries the stomach and bowels are all affected. Dr Rush considered it as misplaced Gout, which he compared in males to the cloth of their clothes, and in females to the chemise they wear. whether the diseases are similar or not, the practice recommended in gout is equally beneficial in this disease. Hysteria occurs in males and in females, when the uterus is affected, and frequently as a symptom of other diseases. In Yellow Fever. it was common I never knew that disease terminate fatally when hysteric symptoms occurred. The treatment during the fever of yore is venesection and purging at least thus are my remedies. Sydenham and Cullen think them of little consequence but I admitted perfectly considered the disease as connected with the alimentary canal. He considered the tonic remedies subsidiary. I wish you remember that I never recommend one remedy to the exclusion of others, it would be like attacking an army with infantry while we have artillery and cavalry at hand. In Hysteria. Tonics may be as necessary at the close, as cathartics in its early stage.—

Lecture 22

In my last I mentioned to you, that Dr Hamilton strongly recommended cathartics in Hysteria. Note you, tonics were sometimes useful at the close of the disease.

I have found them useful with warm bath, in
Aching on horseback &c. In Hysteria (sim
bath) and the free use of Shampooing are highly
useful. In St James pain women they cannot
be highly useful - but stimulating medicines
as Opium must be resorted to. In Ascites
they are useful. Such cathartics which cause
an increased evacuation of water from the In
testines were called hydrogogues. These are the
best, they promote the action of the absorbents
and empty the blood vessels, are the best,
Cream of Tartar, Sulphat of Magnesia &c.
Derangement of the Stomach producing many
diseases, as I have before mentioned. Most Females
many diseases are produced by a derangement
of the primæ viæ. As Chlorosis. (retention of the menses)
Symptoms. Heaviness, listlessness to motion and
fatigue, on the least exercise palpitations of the
heart pain in the back, loins, and hips, flatulency
and acidity in the stomach and bowels, and many
symptoms of Dyspepsia **Cardialgia**. depends upon
an impaired state of the stomach. Cathartics
are the proper remedies. In Chorea. Cathartics
have told you that the bowels are always in a lor-
pid state. The long continued use of purges will
remove it. The patient should always be informed
of his case. There is a slow remittent fever of the
dim, where there is great emaciation, produced by
&c. Costiveness and other symptoms of Indigestion
often mistaken for worms. Dr Hamilton calls it
Marasmus. Purges every 48 hours, pure air -
and articles of easy digestion.
In acute diseases they are given as a part of
the antiphlogistic plan (to reduce action) and in
chronic diseases they are given as an alterative -
In Constipation they are useful. In protracted in
flamation of the knee joint, In chronic inflama-
tion of the eyes, cathartics continued for months
are highly useful. In many chronic cases -
Costiveness takes place very frequently in old age
child purges due to be given. Rye meal and
Roasted apples are to be used as a diet
I shall divide cathartics into vegetable and
mineral

Vegetable Cathartics.

Mustard. There are two species the Sinapis alba & Nigra, Sinapis alba. To obtain its cathartic virtues use the bruised seeds, generally a tablespoonful or ½ an oz in weight is the dose which taken once a day keeps the belly regular, that is producing one regular stool every day. Sometimes however this is not enough, and for this purpose the dose must be either increased or taken twice a day. The seeds pass entire in the stool, and its operation in the urinary passages is commonly evident by its promoting the secretion of urine. Dr Burton recommended it as a cathartic in chlorosis and in Intermittent Fever having some stimulant properties. In Palsy it may be given as it is invaluable, he also recommended it in Gout. It has one advantage i.e. by not leaving the intestines in a torpid state after operation. Manna. This substance though afforded by several vegetables is usually obtained from different species of ash Tree, particularly those from Fraxinus Rotundifolia, which are cultivated in Sicily and Calabria. It is procured by spontaneous exudation but more copiously by incisions made into the bark of the trunk of the tree. The juice which exudes soon becomes concrete, when it oozes slowly the manna becomes more dry and white, and of a Flake or Manna. When the exudation is more copious the juice is of a darker colour, and concretes into a soft unctuous like mass less pure than the other. The history of Manna is known up by Dr Hill, he considered it as a true Gum. Chemists discovered it also to be soluble in alcohol, which shows it to be of a resinous nature. It is soluble both in water and alcohol. We receive several colours of this article but their medicinal properties are the same. When dissolved in alcohol and the solution evaporated a crystalline mass is formed.

Cullen considers it virtues not greater than sugar. Many consider it as greater. The dose is from 1 to 2 ozs. It was formerly given to pregnant women, but it produces colicky pains, gripes, &c. &c. It is generally combined with senna, Honey, sugar, &c. &c. They are principally given in tea and water.

Lecture 23.

I shall now commence with another vegetable cathartic viz Indian cinnamon which grows in every part of the United States. Sugar Cinnamon. which walnut. The bark of this, & especially of the root (Butternut tree) will excite a blister. Its cathartic properties reside in the inner bark, is extracted by decoction & prepared in the month of June. In the Southern States it is used in intermittent fevers. It is always used in dysentery. The dose of the extract is from 10 to 20 grains or even 30. This extract is often very carelessly prepared by the vulgar. It ought to be prepared by the apothecaries.

Podophyllum Peltatum. May apple. mandrake. This plant is very common throughout the U.S. the fruit is excellent and by many thought delicious. The leaves are poisonous. Some told it has less power and gripes more than jallap. Some place it on a footing with jalap. It has been used in cases when jalap has been employed. It is used in Intermittent and Remittent fevers and often in Dropsy. Dr Barton says the root possesses some narcotic property. The root is the part of the plant which is used as a cathartic, in a dose of 20 grains. It is most advantageously used in combination with calomel or crystals of tartar. The root often also operates as an antihelmintic, and as such it is used by the cherokees and other Southern indians. The best time for gathering the may apple for medicinal purposes is the autumn, when the leaves have turned yellow, and are about falling off.

Ricinus Communis, Palma Christi. This plant grows in both Indies, Africa and the South of Europe. It also grows spontaneously in the Southern States of America where it is now becoming an article of export. It is of speedy growth and in one year arrives at its full height which seldom exceeds 20 feet. The seeds of the capsules of this plant are farinaceous, with a considerable quantity of mucilaginous matter intermixed. They afford by expression or decoction an oil which is used in medicine in this country under the name of castor oil. When obtained by decoction of the bruised seeds in water, it is purer and less acrimonious than when obtained by expression. It is one of the most ancient purgatives, it is one of the safest and mildest. It has been said to unstrike the tone of the bowels less than any other cathartic. It is particularly suited to cases of costiveness, and even to cases of spasmodic choke, gripe in stubborn other cases of the bowels (affections) In the West Indies it is found to be one of the most certain remedies in the dry belly ache, or colica Pictonum. I have never found it heating or irritating to the rectum and Pierson have found it sufficiently well suited to hemorrhoidal persons. It is good when any foreign substance has been swallowed but it is better to use none, as when metals have been swallowed as coffee owing as it is supposed that an affinity will take place between the oil and copper. In common cases. Dose ℥ss for an adult, for a child of 8 months old a teaspoonful for 5 months old. Wine or brandy is the vehicle in which it is occasionally given but I prefer coffee. It is also taken floating on peppermint water. It ought not in inflammatory cases be given in wine or brandy, as it would be like adding fuel to the fire. I use coffee as a vehicle it destroys the taste of it. Some use it in combination with other articles as.

℞ Form the Oleaginous Mixture →

Ol. Ricini.	℥ij.
Succ albi.	℥ij
Sol. G. Arabic.	℥ij
Essential oil –	aa
	6 gutt

A little laudanum may be added particularly in cases of dysentery though it is much better to give it with coffee. Some say rancid oil purges less and gripes more than recent.

This is incorrect I have given it in a rancid state and never have I seen these effects. Oleum Olivarum has been recommended by Dr Chapman as a substitute for castor oil. This is incorrect there is a material difference between these two oils

There are certain bowel complaints in children in which I have found it highly beneficial it is also used with glysters its properties are similar to barley water melted butter is useful in bowel complaints Oil of butter is useful in cholera it often relieves griping. Cassia Senna. Senna. It grows principally in Upper Egypt from whence the leaves are brought (dried and picked from the stalks) to Alexandria in egypt and thence imported into Europe Dr Hoo describes 3 kinds. He supposes the alexandria senna to be the best. Specimens sold in our shops the Alexandria & India, the first is preferred as their are not so many ~~[illegible]~~ stems mixed with it. The leaf is the part of the plant in which the medicinal virtues reside Water and Alcohol alike extract its properties. It was first used by the Physicians in Arabia it is frequently combined with manna with Tamarinds or super tartrate of potash and as its taste can be covered with sugar or manna it is a purgative very frequently given to children. It is usually given in the form of watery infusion 2 drachms being infused in 4 or 5 oz of boiling water generally with the addition of a few coriander seeds to cover the flavour and obviate griping. it has succeeded in some cases of hernia when other cathartics failed

Lecture 24.

Cassia Marilandica possesses virtues similar to the senna and may be substituted.

Rhubarb Rheum Palmatum. besides the Rheum palmatum two other species the Rheum undulatum and Rheum compactum are cultivated with the view of obtaining their roots to be used in medicine, nor is any considerable difference it is said to be observed, between the root obtained from any of them, although it is only dried are preferred. The best rhubarb is that named Russian, or turkey, it is in small pieces with a large hole in the middle of a lively yellow colour with streaks of white has a smell peculiar and somewhat aromatic and a bitter, slightly styptic taste. Another kind is imported from the E. Indies or rather from China in larger masses more compact and hard heavier less friable than the other and having less of an aromatic flavour. it yields part of its powers to water by division. alcohol likewise dissolves a considerable proportion of it. and dissolved alcohol appears to be its most powerful solvent, dissolving all its active matter. (is a gum) It appears to be contain a portion of tannin as it gives a deep colour with the salts of Iron. Some degree of stipticity is always evident in this medicine, and as this quality acts when that of the purgative has escaped. So in cases of diarrhoea when any evacuation is proper Rhubarb has been considered as the most proper means to be employed. The chinese rhubarb is supposed to possess more astringent quality than the turkey plant. The quality of the root are that of a gentle purgative and indeed so gentle that it is often inconvenient by reason of the bulk of the dose required which in addition must be from 1/2 a dram to a dram when given in a large dose it will occasion griping as other purgatives do, but it is hardly ever heating to the system, or showing the other effects of the more drastic purgatives. It seems to have no debilitating effects on the bowels it always leaves the intestines in a vigorous action. Rhubarb is for the most part too bulky to be used in the form of pills Dr Barton supposed it to be possessed of diuretic qualities from the idea that it coloured the urine.

The dose of Rhubarb as a cathartic is one scruple or ja
drachm, it was the favorite remedy of Dr Barlow, he gi
it in combination with calomel in the proportion of 15
grains of Rhubarb, with 4 or 5 grains calomel.
It is usually used in the form of infusion. Rhubarb ℥ij
boiled in water with a few fennel seeds is a very good
remedy in colicky complaints of children from acid-
ity of the stomach dose a table spoon full.
The several preparations relieve colicky pains
gave case when laudanum does not. I can then
you recommend it strongly although I do not give
laudanum. The roasted Rhubarb possesses a more
astringent but less cathartic power or property.
(roasted Rhubarb is made by heating Rhubarb in a spoon
then cools In diarrhoea use it.) Rhubarb is appli-
ed to wounds and to indolent ulcers. It acts as a
stimulant. In habitual costiveness it is much
used. It keeps the belly regular for which it is
~~much~~ employed (frequently) is by no means prop-
er as the astringent quality is ready to undo
what the purgative has done but I have found
that the purpose mentioned may be obtained if
the rhubarb is chewed in the mouth and no more
is swallowed than what the saliva has dissolved
In that case it appears that the astringent qual-
ity is not largely extracted and therefore the ca-
thartic will operate as required, and I must remark
that in this way employed, it is very useful to dyspeptic
persons, I prefer the use of pills made with Rhubarb
and Ginger to dyspeptic patients as it acts as
a stimulant to digestion. it is much employed
particularly in combination with calomel
In Gout it is an important remedy (article) In
Scurvy it is a very valuable article it is generally
combined with calomel I have seen good effects from
this combination in this disease
In diseases of children I use the rhubarb in the
following manner

℞. Rhubarb ℥ß.
Magnesia ℥ß
Ol. of anniseed ♭ gutta } or any other essential oil
Aqua — ℔ ij

Have it well agitated before you use it. Give teaspoonful every 2. hours
which is in common use I have used it very often and have reason
to be pleased with it. Rhubarb with senna is good in
Gout.

The Magnesia relieves the colicky pains of infants very effectually. Give the Aut Lusk. Lime water & Mucilage of gum arabic are nice cases of dysentery without any other remedy.

Convolvulus Jalapa. JALAP. As a perennial species of convolvulus. It is a native of Mexico and vera cruz. It is brought to this country in thin fusiform slices, which are covered with a blackish wrinkled bark, and are of a dark grey colour internally marked with darkish or blackish stripes. Jalap contains a resinous and a gummy matter. It possesses a peculiar quality appearing to reside in the former as it is extracted by alcohol, while its watery infusion is comparatively inert. Proof spirit is its proper menstruum. The resin thus separated is an acrid inflaming matter, which thrown into the stomach proves a drastic purgative, but it is rendered milder by being divided by a fixture with any hard powder before it be exhibited. It is certainly by reason of part that Jalap proves purgative (entire Jalap) and in large doses proves a strong one, but as it is given in powder, the previous mixture, by dividing the resin, renders the entire Jalap a milder medicine than the resin taken separately. The medium dose is ℥ss. When triturated with cream of tartar it will operate in smaller doses than when taken by itself, and at the same time very moderately and without griping if triturated with hard sugar. It becomes an moderate dose a safe medicine for children, which in this form they will readily receive, as the Jalap of itself has very little taste. Jalap may thus be rendered quite safe. It may however be given in large doses and especially by being joined with calomel be rendered one of the most powerful purgatives, either as a hydrogogue, or as an alterative, and if the mixture not with more safety than any other drastic purgative. It is actually used in the hip disease in combination with cream of tartar, given daily.

Antiedic Powder

℞ Jalap — 1 gr.
Rhubarb — 1½ gr.
Resin of Jalap — ½ gr.
M. Fiat

℞ Jalap ℥j
Cream of tarta ℥j
M. given daily in the hip disease a teaspoonful for a dose until it operates.

In Bilious Cases Jalap and Calomel are highly useful. Dr Bush employed it with great success in these cases.

Lecture 25.

Aloes, a native of asia africa and america, is a concrete resinous juice, there are 3 kinds 1st Cabalin or horse aloes, these differ in their sensible properties or qualities. 2 aloe Barbadensis. 3rd the socotrine as also in their sensible properties or qualities. The socotrine is brought from the African Island of Socotora and is distinguished as the finest, it is small pieces of a reddish brown colour, is very scarce not an atom is at present in the city 2 the barbadoes, or hepatic aloes, which resembles the liver in colour, it is darker than the former, and more bitter. 3 the horse aloes, is ~~intensely bitter~~ extremely nauseous, and is weaker in its power, the taste of all the kinds of aloes is intensely bitter, the odour is disagreeable, they consist of extract and resinous matter, the former being in larger quantity the latter is obtained by the action of alcohol has little smell or taste diluted alcohol dissolves all the active matter of this concrete juice.

Aloes passes through the stomach and small intestines, without much irritation and principally acts on the large intestines, and especially upon the intestinum rectum, it has been supposed to have a tendency to occasion hemorrhoids, an opinion for which there does not appear much foundation I have known instances of its safety even in hemorrhoidal persons, and I am persuaded the hemorrhoidal affections are produced by a costive habit, much more frequently than by the use of aloes. It is slower in its operation than any of the other cathartics. It probably acts by stimulating the muscular coat of the ~~stomach~~ intestines, and thereby increasing the peristaltic motion. It remains 10 or 12 hours before it operates. It is also supposed that its stimulating effects bring extended to the uterus, it has been regarded as a purgative to be avoided during pregnancy, and on the same hypothesis it has been supposed to exert an emmenagogue power. in a dose of 1 or 2 grains it acts as much as if a larger quantity were taken for the different preparations I refer you to the dispensatory. When you hear of the elixir proprietas it is nothing else than the tincture of aloes with myrrh, and not the elixir of Paracelsus.

It is prepared in the following Manner. ℞. Myrrh ℥ss ℈ij
Aloes ℥ss ℈ij
Alkohol ℔ss ℔ij

Gambogia. Gamboge. Gamboge. E. Indies
This Gum Resin is obtained by exudation from incisions made into the trunk and branches of the tree. It is bitter of a lively yellow colour and resinous fracture has a taste bitter and acid water and alkohol partially dissolves it and its solution in alkohol becomes turbid on the addition of water. It is much used by painters, it acts both as an emetic and cathartic it is one of the most drastic purges dose 2 to 4 grains but 8 grains may be given with safety. Cullen gave it alone in divided doses 3 or 4 grains rubbed with sugar every 3 or 4 hours in Dropsy. Mr Murray tried not destroy its property by baking it with paste if it is used it should be combined with calomel or jalap. In cutaneous Eruptions, it is found to be useful. in tinea capitis. it has been famous over Europe as the fittest & most effectual medecine, for expelling the tænia and tape worm. I cannot say much of its efficacy in this case

In Dropsy it has been used without success. I have no doubt that when combined with calomel, or cream of tartar, it is a very valuable remedy or medicine

Scammony. (Syria) Is obtained by cutting the root of convolvulus scammonia and inspissating the juice which exudes, by exposure to the sun and air. It is in small fragments, of a blackish gray colour, having little smell and a bitter subacid taste, the resinous matter is in greater abundance than the gum. It was used by the Greeks and Arabians but it is uncertain in its operation. small doses will sometimes purge violently, while a large dose will be inert. It operates so violently, while it, sometimes causes bloody stools and sometimes inflammation of the bowels griping &c. Cullen's objection which is a strong one is that it is not found pure, is frequently found adulterated.

Colocynth. Is obtained from the Cucumis Colocynthidis. The part of this plant used in medicine is the dried spongy or medullary part of the fruit, it is white soft and porous and has the seeds which are comparatively inert, mixed with it. Its taste is intensely bitter. I have not used it, if I should use it, it would be in the manner of combination with jalap and calomel. it is one of the most drastic purgatives, so much so that its operation is not readily regulated when in combination with calomel & Jalap it is given for ascites and coma also in obstinate constipation Dose from 3 to 8 grains

Helebous Niger, Melampodium Black Helebore radix
Austria Italia. called melampodium - from melampo
who used it he cured the daughter of king Cretus who
was affected with mania. It is not much employe
Its active power seems principally to reside in its resi-
nous part. it is a drastic Cathartic. In dropsy it
has been employed as a hydrogogue cathartic princi-
pally under the form of spirituous extract.
The Tintura melampodii was strongly recommended
in ammenorrhoea by Dr Mead as an Emmenagogue.
Helebous alba. white helebore. is laid down, too
much distrust after followed its use.
Momordica Elaterium. Wild cucumber. is
the most violent of all the cathartics. Dose 1/2 grain
Dr Hennar revived it and uses it in dropsy especially
hydrothorax. I shall now speak of

Mineral Cathartics

Calomel. Submurias hydrargyri. Murias Hydrargyri
Nitrus Mercurius Dulcis
By triturating the corrosive sublimate with 2 parts
of quicksilver and 4 of corrosive sublimate, when
the quicksilver is disclosed (when no more globules appear)
wash it in hot water the corrosive sublimate will
be removed, and the calomel can be obtained as it
does not dissolve. you will learn from the practitio-
er of chemistry how to prepare it. Dose for an adult
6 to 20 grains 10 grains is the medium dose. Doctor
Author Clay of Lancaster took 3 grains of calome
it purged him in two weeks after which he took 80 gr
which did not purge him more (nor produced no
more griping than the former dose) It is one of the so
fest cathartics we can employ, it probably acts by
stimulating the mucous glands, of the Intestines
and increasing their discharge as the stools are li-
quid. Calomel administered at bed time will operate
in the morning. In the Southern States large doses are
given in bilious fevers. I prefer 10 grs of Calomel 9 to
grains of Rhubarb as has been before mentioned

Forms the — ℞ Nitre 3i
Calomel 8 grains - antimonial powder
Tartar Emetic 1 grain

Given every 2 hours until it operates, in children no cathartic can be disguised so well as this, may be given in mucilage or a piece of bread, do not dilute it in water as it sticks to the bottom. Dose to a child of 1 month old is 2 grains if it does not operate it must be followed by a dessert spoonful of castor oil. At 1 year 5 grains of 10 years 5 to 8 grains. In early life 1 pint castor oil, castor oil & magnesia 1 pint in children under 1 year except in croup, 2 grains every hour until it operates. Dr Kuhn one of the most successful practitioners the profession can produce, has given as much as 20 grains to children, with perfect safety in croup.

Lecture 26.

At our last lecture I spoke of Elaterium, it has lately been supposed to form the essential ingredient of L.D. Can medicinal it is however less narcotic, and I have already told you that the colchicum autumnale, approaches nearer to the celebrated gout remedy. Dr Everard Home has lately taken up the subject, and from him we may expect some interesting intelligence. Since lecturing on the Can medicinal I advised it in a case of gouty a delicate constitution 3i. or half the usual dose at evening, it induced sleep and in 5 hours she awoke with violent purging and griping, the medicine to use here are purging diarrhoea diaphoresis & complete relief. Sulphur. Is a laxative which has long been used in medicine. dose 1 or 2 drachms. It is supposed to act less on the large than on the small intestines. that it does not act on the secretions, and hence it is used in constipation arising from torpor of the alimentary canal. These cases are frequently attended with hemorrhoids and here sulphur is particularly useful. Dr Chapman has found it useful in tinea capitis. the remedy which I have employed with the best success is a mixture of butter and salt. In Rheumatism Gout and Dysentery we have other better cathartics but in mild remittent and intermittent fevers, it is much used and with success 3i. with molasses is a much better mode, than the combination with beardy, as recommended by Dr Granger.

Yeter Physick and myself have frequently employed Sulphur in these days with much advantage combined with Cream of Tartar. It is a popular remedy much used in spring. I have already mentioned the improprieties of Jeweg cathartics, or any other remedy in health. Magnesia is generally combined a small proportion of Sulphuric Acid. However the superiority of the carbonate, it has not tatizable rate. It is a mild laxative and combined with Rhubarb forms a good medicine for children. Cream of Tartar let form a more active remedy. When we wish to correct acidity it is useful and has been employed in dyspepsia, Gout and more latterly in calculus. Neutral Salts increase the secretory, some are mild others more active of the class. They are well adapted to empty the bowels, and consequently are often in all febrile diseases. Of these Glauber salt (sulphas soda) is the most useful, and produces abundant secretion from the intestines with little sickness or griping, remember the effloresced salt has lost the strength of the crystals. There is one objection to this salt which is its nauseous disagreeable taste, which is in some measure obviated by combining it with vinegar, lemon juice Cream of Tartar or the Seltza water. 1 oz Glauber salt 1 gr. tartar emetic divided into 8 equal parts and one in two hours will act as a powerful diaphoretic and is useful in fevers. Glauber salt should be dissolved in boiling water, and when dissolved seasoned with lemon juice and sugar, or with Seltza water. Sulphate of Magnesia is as bitter and nauseous as sulphas soda, it differs not very greatly from the same. I employed it in the same cases with an eye after Calomel when it refuses to act readily. Tartar Soluble or Rochelle salt, is not so nauseous less active. It is much employed in France and agrees well with their inert practice.

Cream of Tartar is a useful and agreeable cathartic and forms with sugar and water a pleasant beverage useful to assist the operation of other purgatives, or when a milder operation is desired, as a Purge, to every from entire operation is excited with Jalap and mint it is useful, when we wish for a repetition of a thirty, for a long time. In Gout it is inadmissible. In dropsy it is a valuable remedy it may easily be given to children with lemon, with powder of lemonade. Saturated with potash it forms soluble tartar which is not much used, being a feeble remedy, it has diuretic properties. Phosphas. Soda tastes like table salt it is used by the French in boiling but it is too nourishing to be employed as a remedy in our diseases

I have now finished with cathartics, have taken the liberty to strike out of the materia medica a
few and unless they are better I ask for no more. I will make a
few observations on the combination of medicines. Different remedies
cathartics are most frequently used in combination with
one another. Ancient remedies were very complex consist=
ing of ingredients some of which were inert, and others
interfering with the object in view. A modern Physician
was asked why he used so many remedies, replied that the
disease might choose for itself. There is existing a pre=
scription of Herman containing 100 different articles.
Modern Physicians have gone to the other extreme
of prescribing only a single article when in combina=
tion would answer better. Mr Fordyce has written ma=
on this subject alone, and Rhubarb occasions an exce=
ration of secretion matter while Glauber Salt pro=
duces watery stools. Now it is evident even we to=
with both these effects, that both remedies will be better
than either. If the stomach is affected with acidity
give magnesia, and if we wish to ascertain whether
an evacuation is the effect of the remedy or not give
Rhubarb, and the colour of the stool will deter=
mine the point, there can be no hesitation in as=
=cribing to the bowels of these observations. I will con
only one more example. Jalap & other cathartics when
alone produce nausea and vomiting, but given with
mint they produce no disturbance of the stomach
it is advisable to combine articles together, unless we
know they will not interfere with each other in
their operations and it is important to combine
those medicines, which experience has shown to
act better in a state of combination.

Enemata act on the large Intestines & sometimes
the small intestines are excited sympathetically =
The rectum use them to remove costiveness, and consider
the separating an essential part of the function of this
chamber. When costiveness is only occasional they
may be used but not in habitual costiveness. We do
injection the following answers every purpose. common
Salt molasses, and olive oil each a table spoonful
water lukewarm. They are sometimes used to with
advantage, to expedite the operation of other ca=
thartics in some cases of hernia, and when where ac=
tive have been given in vain, they have sometimes
been used with success. Tobacco is commonly employed in
desperate cases and under circumstances which will be
mentioned by the professor of surgery. The tobacco glyster
is formed by adding ℥j to a pint of water and employ
half of it at a time. Syringes are most economical
though bladders are frequently employed

Lecture 27.

Diuretics are those medicines which promote the urinary discharge: as to the precise mode of operation there is much difference. They act in two ways, 1st by exciting the urinary organs, 2 by invigorating the powers of absorption. The general effects of diuretics are sufficiently evident. They discharge the watery part of the blood, and by that discharge they indirectly promote absorption. Dropsy is the disease in which they are principally employed, and they are adapted to every form of it. The diuretic can also be administered with less injury to the patient by exciting the urinary discharge, than by any other method. The success of diuretics in dropsy is however very uncertain, sometimes more of them succeed sometimes one only more powerfully than another. Though in this there is no uniformity we are the causes of this variety of operation well understood. In general it is obvious that where a strong predisposition to the disease exists, or when it originates from organic affections of the liver and other chylopoietic viscera, no great advantage can be expected from the mere evacuation of water by the action of diuretics, it is only in those cases where an accumulation of fluids has taken place from diminished absorption or some similar cause that they can be expected to effect a cure, it accordingly happens in practice that an increased discharge is effected by the exhibition of diuretics, and still the superficial swellings are not removed or if they are they speedily return again.

It was formerly the practice not to allow any liquids or only in small quantities in dropsy. Hippocrates enjoined his patients to abstain from wines liquors this rather prevented the action of diuretics, the remedies that were employed for the cure of this disease (dropsy) hence the practice that was formerly adopted of diminishing the allowance of drink, is nearly exploded. Hippocrates and his followers are undoubtedly wrong, but I by no means think it proper to fill the stomach with watery liquors. Water has in some instances alone cured the disease, when it has been taken in large quantities. Water impregnated with ardent spirits, as Gin, whiskey, &c. is useful: Water impregnated with acids also promotes the urinary discharge.

Many cases even have occurred in which mineral waters have acted as diuretics, and effected a cure in dropsy. The action of diuretics is promoted dependant on the state of the vessels of the skin. The evacuation of urine is in an inverse proportion or ratio to perspiration. If given a nice cure of this class has been given, these vessels have been stimulated by external warmth, its function is rather determined to the surface and great of diaphoresis takes place. But if the surface is kept cool the diuretic effect is more certain so much indeed is that state of the surface determined to the kidneys that walking, that the usual diaphoretics may be thought to act as diuretics walking over a cold floor, cold applied to the pubis, cold drinks, cold applications, will raise an excessive urinary discharge. Diuretics promote the action of diuretics as is evident when a great deal is taken it will at most pass off by some of the emunctories as perspiration urine. Diuretics have been likewise used in calculous affections with the view of preventing at least the increase of the calculus by rendering the urine more watery, and they have occasionally though rarely been employed to lessen plethora or to check profuse perspiration. Misuse of diuretics was to increase the quantity of urine as of use in Gonorrhoea and other affections of the urinary passages by lessening the acrimony of the urine, which excites pain from its action on these parts when they are in an inflamed state. The repairing from diuretic drinks causes the vessels of the kidneys to contract and thereby prevent the effects of diuretics. Dr. Duncan has divided diuretics into 3 classes (viz) Incitantia, Laxantia, Refrigerantia. I see no advantage in this classification. They however may be classed into 2 classes. 1 those that have a relation to the absorbents 2 those that have to the urinary organs. Whatever reduces the force of the circulation exerts a sanative influence and in this way promotes absorption of the effused fluids. I shall divide diuretics into 3 divisions, 1st. The cooling and laxatives as the neutral salts 2 stimulating as the Balsams copaiva 3 sedatives or narcotics as Tobacco, digitalis. There is hardly one that is exclusively a diuretic. many of them are diaphoretic, which when excited diminish the diuretic effect. But we have many which though diuretic (not wholly) produce it in a very considerable degree. The secretion of urine varies very much, in some cases very little urine is secreted and in some cases as diabetes the secretion is very great. In a healthy state, it is subjected to the powers of animalization and its original properties are changed but when it becomes an excretion and is removed beyond the sphere of animal power, as in instance when it arrives at the bladder it is then subjected to chemical reunion and is regenerated. I am convinced of this, as no substance in its primitive state has been found in the blood

But frequently on the operations of injecting milk, lime &c. In addition to this there seems to be a direct communication between the stomach and bladder, otherwise how could the injection of garlick, turpentine, may into the bladder in the short space of 20 or 30 minutes, after taken into the stomach, and Dr Mus Pleasant's Philosophy transactions, urgently to which I refer plain that the stomach contents of the clyster, forming a putrefactive portion a cardiac and perforce portion, the cardiac portion appearing to be the part that by the direct communication with the bladder, this very fluid by giving the perforation of a dog and giving him Tinct of Cantharides in 20 minutes to his bladder. The test of the cantharides which has been certain alkali or potash, it assumes an orange colour when mixed with it.

Lecture 28.

Diuretics are given in pulmonary diseases. Catarrh Pleurisy but for this purpose of diminishing arterial action. Digitalis is given for this purpose. In scrofulary arthritis (with effusions of the chest) they are given as diuretics and are reduction in these cases. In Cystitis they are useful by diluting the urine and lessening its acrimony. In Nephritis they are given with the same intention. Dr Elliotson's Physiology acetate of potash or his list of diuretics. It is so evident that I wish to see it expire. Nitras Potassæ. Nitre is one of our best saline diuretics, and I am surprised that Dr Elliotson should consider it too inert to be employed in dropsy. It is given alone or in combination with other articles. From 8 or 10 grains gradually increased. It is improper to begin with large doses, but before copious diuresis can take place, it is necessary to give 3 or 4 drachms in 24 hours. The action of the medicine on the kidneys is perceptible when smaller doses are given. But to obtain its full effect in dropsy it must be used magnificently. I presume this neglect of this circumstance which led Dr Elliotson to consider it so inert. Doctor Rush's favourite Antimonial Powder was an excellent prescription. Nitre gr. viii. Tartar Emet } gr. Calomel } ana gr. viii. Divide into 8 Powders.

It is sometimes proper to omit the calomel when the tartar emetic vomits substitute for it 4 grains Ipecacuanha instead of Dover's Powders. Dr Physick and myself have used 10 grains nitre, Opium 1 grain, Ipecac. 1 grain. I think it a better febrifuge than the combination of sulphate of Potassa. A common practice in this country is to give nitre in solution. 1 oz to a quart of water each table spoonful of which contains 7 or 8 grains of nitre. And this is useful when diuretic, patty pan implicate. Super tartrate of Potash is soluble in one 30th its weight of water. It has been highly recommended by Home, Ewart and Dr Chapman. Dr Dropsy Herbar relates that by its use he cured 33 out of 43 cases, and if his cases been like the generality of cases of dropsy his success was very remarkable, for I have other medicine have I ever known such a perpetuate number of cures.

As a cathartic I have no doubt it useful in the febrile form of dropsy, and I also believe that it produces some effect as a diuretic. Doctor Murray observes there are two modes of giving it one as an electuary the other dissolved in a large quantity of water. It is more usual to give it dissolved in water, when purging is indicated, and whenever I have used it I have found large watery evacuations with the stools. I have never known it to prove diuretic unless it purged at the same time. It often fails when others succeed and this remark is applicable to every other of the class. Soluble tartar in small doses is much used by my medical friends. My medical friends by every 2 hours. By Dr. Physick it is considered the ~~diuretic par excellence~~ rectified spirits of nitre. Nitric acid 1 ℔ Alcohol 3 ℔ is added gradually distilled a week. The medicine is extremely volatile and while distilling it the receiver must be surrounded with ice.

It is easily decomposed which under it proper to employ it in a recent state, it may however be purified by adding lime water and a distillation. This medicine is frequently employed as a diuretic, without regard to its operation. In Europe it is customary to give it in the early stages of fever and I have known ill consequences to result from the stimulating power of the medicine in such cases it is on the other hand useful, in fevers of diminished action, when the skin is dry tongue parched and secretions stopped and other symptoms of dropsy, are not relieved by bleeding and antiphlogistic remedies. I have known it employed with advantage. I generally employ 30 gutta of the former and 20 of the latter as less common remedies as a diaphoretic, I generally combination: my predecessor who is fond of large doses of medicine recommends from 2 to 4 drachms. The medicine is so stimulating, that I would use it less freely 20 gutta as a diaphoretic 30 drops as a diuretic 3 drops for a child, in the fever denominated break bone I have seen its anodyne effect. There is much pain in the loins and back, and it is thus for difficult to distinguish it from rheumatism. After venesection and purges the remedy is very effective immediately of cure.

Lecture 29th

Digitalis Purpurea. The petals are not always purple
ufo hence Dr Barton proposed to call it digitalis of-
ficinalis. It flourishes best in a dry gravelly sandy
soil. The leaves are bitter nauseous acid and acrid
to the taste. It is to be gathered when in blossom.
The stalk of the leaves ought to be rejected, dried by a
moderate fire, powdered and kept in well stopped bottles
when the petals are which the leaves are said to be by
esse. This is the most powerful diuretic we possess
besides which it has other properties being a strong
narcotic. no medicine so quickly and powerfully reduces
the pulse as this, but I have not considered the effect
of medicine on the pulse as a criterion of their seda-
tive or stimulant power and besides given in doses of
from 1 to 3 grains it accelerates the pulse for a few
minutes it is therefore a stimulant different from the other
It first quickens the circulation produces headache, sen-
sation of heat at the stomach flow of saliva succeeded
by nausea and depression of the pulse. In large doses
it produces anxiety nausea vertigo syncope coma and
convulsions & death the pulse is obviously affected and
so is the stomach. There is one caution in the use of this
remedy it is sometimes given several days without any
sensible effects when the narcotic operation is suddenly
and powerfully produced, and for this reason we
must be cautious not to administer the remedy too
frequently or increase the dose too fast. The sudden
flow of urine is by no means a constant effect.
another singularity is the influence of posture on the
pulse after taking digitalis. I employ the leaves fresh in
powder, and commonly rubbed up with nitre, 10 grains
nitre to 2 of foxglove. It is safest to begin with the grain
It is also given in pills but this way is not so safe.
when the infusion is prepared, use 1 drach to 8 oz. water
boiled to 7 ounces, strain and add 1 oz of spirit to
prevent fermentation give a table spoonfull 2 or 3
times a day. It possesses no advantage over powder
Tinctura P. Dig. digitalis 8 ounces diluted alcohol
dose 20 drops. Lawrens Tincture 2 ounces digital
8 ounces Brandy dose 10 to 15 drops Home and many
others prefer Lawrens tincture

The decoction and extract I have never seen used, most approved writers forbid the administration of digitalis, oftener than once in 5 or 8 hours. It is a good rule to give it every 24 hours and great attention must be paid to patients without affecting the pulse. The dose is to be increased very gradually and when its effects on the stomach kidneys and pulse are observable the dose is to be diminished if it purges use laudanum. This remedy was introduced into regular practice by Dr Withering. He remarks, the diuretic effects of the medicine do not depend upon the nausea or vomiting it produces and that they are prevented by purging. Since that time it has been used by Dr Pighle, Cline of Chester, Hunter, Hamilton of Suffolk, and several others which have reported favorably, yet the same objection may be made to the other diuretics, I have often employed it in anasarca and with success. In ascites there is generally some primary organic affection which renders diuretics useless. In hydrothorax I have employed it with some advantage but I am decidedly in favour of nitre calomel and squills in this disease notwithstanding the extraordinary encomiums of Hamilton. In the dropsy I have in several cases been obliged to change this remedy for calomel and squills. In all cases of dropsy the system requires our first attention. If the pulse be active bleeding and purges are to be used and digitalis is not advisable. Even Withering himself did not (under such circumstances) to the remedy until he had previously employed evacuating remedies. He has pointed out the cases in which it may be used with success. It is said to be adapted to dropsy of the limbs, edematous face, and other hydropic cases following scarlatina. I have in such cases used the saline diuretics especially the cream of tartar. Dr Withering has given the following aphorism. Digitalis will not universally act as a diuretic. 1st It does so more frequently than any other. 2nd It does its effects after other diuretics fail. 3d It is more frequently than any other peculiarly of selected from other diuretics. This is not so well known as they to prove very beneficial, when digitalis had been given without advantage. Upon the effect of the remedy on the pulse, its use to retard the circulation was to be effected. Venesection has long since been supposed an unnatural remedy, and as a substitute digitalis, has been reported to. It has therefore been used in hemorrhagy. If the accounts are creditable the medicine is valuable

but whoever has seen much of hemorrhage knows it is difficult to determine to determine the efficacies of the remedies or to know whether they are unfavorable or not. The power of digitalis in hemorrhage I doubt not but contends that it is not the proper remedy and if ever we follow the indications of nature it is when we bleed in hemorrhage for nature points out this recourse I do not attempt to condemn for glove accustomed to prescribe for the system if the bloodvessels are sufficiently empty and the febrile action reduced also the patient continues liable to a return of hemorrhage under such circumstances foxglove might be useful but it ought not to be employed except under these circumstances and even then I should prefer Ipecacuhanna and acetate of lead it has been considered most useful in uterine hemorrhage and hemoptysis. Dr Chapman states he has seen bleedings from the uterus, increased by this remedy which will reduce the circulation and give tone to the uterus itself. This is not the effect of digitalis. This observation of Dr Chapman's is extremely valuable. Dr Hamilton & Fleming employed it in inflammatory diseases, but it is now laid aside. I look with astonishment at the attempts which have been made to substitute digitalis for the lancet, in pleurisy and other cases (discard) in which the efficacy of bloodletting has been for ages established. Give me one remedy of undoubted efficacy and for every disease and I ask for no more.

Lecture 30th

In diseases of the thorax digitalis has long been considered as useful. In asthma attended with unwieldy limbs, I always suspect effusion in the thorax, I have found digitalis a valuable remedy. 1 oz Tincture Tolu 1 oz Laudanum 1½ oz digitalis in an alcoholic solution Dose from 10 to 40 gutta 3 times a day. Besides this there are other cases of asthma in which digitalis is decidedly beneficial. It was recommended by Dr Heberden and Physick has followed his practice with advantage

To show you the necessity of caution I omitted to mention the following case which occurred in my practice I was called in consultation to a woman in incipient Phthisis, and we concluded to give her digitalis in small doses, she was accordingly directed to take 2 gutts of the tincture in the morning 3 at noon & 5 at night. This nearly produced death, her pulse was reduced from 112 to 45. and symptoms similar to those arising from the improper use of tobacco succeeding. The Phthysis digitalis was long considered a specific but such views have been shown visionary In the medical and Physical Journal of Edinburgh for 1799 & 1800. much was written on the efficacy of digitalis in consumption, Dr Beddoes declared it will cure consumption as certainly as bark cure ague. Sydenham made a similar remark of horseback exercise yet the disease are as fatal and fatal as ever. This shews us the necessity of fixed principles in medicine In this country the medicine has been used but with less advantage than the accounts of the english practitioners would lead us to expect. Dr Balie a french writer of most extensive practice has given a very accurate definition of consumption. Cough difficulty of breathing, hectic fever and sometimes pain and frequent expectoration, Chronic catarrh as those cases in which a small quantity of blood is spit use is not genuine pulmonary consumption. In this country the rapid change of temperature which is greater than any where produces violent catarrh or pleurisy, which is frequently followed by symptoms of Phthisis but they heal without difficulty, and hence it is supposed the lungs were not ulcerated. this supposition is founded on a belief, that all ccs of the lungs are incurable, which is very erroneous we know that injuries of the lungs heal as quickly as any other part of the body. they often reappear after injuries, as from inflammation, but as soon as the pus is evacuated they heal, and the patient continues well. The professor of surgery has described to you several cases illustrative of the curative power of the lungs.

I have known a bullet logged in their centre for years without any inconvenience. Having attempted to convince you, that suppuration of these organs is not necessary to prove fatal, I next observe that the diseased action of the lungs in pulmonary consumption, is peculiarly different from that of healthy inflamation. The tubercles are sometimes to scrophulous ulcers, but perhaps not exactly like them. The incurable nature of the disease does not depend on an impossibility of healing even tubercles. The misfortune is that while one heals, others are in a suppurating or forming stage, and accordingly we find in consumptive subjects, tubercles varying from the size of a pins head to that of an apple. Some are cicatrized, shewing the possibility of healing them, others delineating or containing pus. It is the hectic fever which they give rise to, that destroys the patient. Just as in scrophulous ulcers of the joints the constitutional disease keeps up by the local affection terminating the patient's life. There are cases in which no tubercles exist, but the lining membrane of the air cells produces inflamation, and suppuration produces the symptoms of consumption. Sauvages makes 20 species according to their kind and seat of the disease. But I prefer the arrangement of Bayle who confines the term to organic affection of the lungs. Tubercular consumption is far more frequent than all other kinds, there is no reason to suppose with Rush that they result from or are the terminations of common Phlegmonous inflamation. We know they terminations are always different from tubercles. I believe the disease of hectic constitution and the suppurating cavity, not a few of pus. The indications are to cure the ulceration and for this digestatives does nothing. But to relieve some of the symptoms the medicine may be useful with advantage the pulse being 120 it is peculiarly useful in reducing it to a natural standard. The quickness of the pulse is merely sympathetic & the removal of it will not cure the disease.

Besides minding the pulse, Dr Duncan states it is used in some cases as a diuretic especially in Catarrhal consumption. He also correctly observes that in Phthisis the reduction of the pulse by digitalis is more difficult than in any other disease. In cases of Chronic Catarrh, when symptoms arise similar to those from tubercles, the digitalis is a very valuable remedy, especially when venous-ity is exactly proportionable to its effects on the pulse. In these cases a convenient and useful way of giving it, is with carbonate of soda. In incipient Phthisis it is useful, when we can carry out depleting remedies so farther but after ulceration takes place, Cole writes even its warmest advocate cannot, or it greatly will go farther and declare that it is absolutely hurtful, by impairing the tone of the digestive organs. But I shall be told the remedy has been used in all its stages, with advantage, according to the accounts of those who have used it, among these that of Dr M. Innis is the most extraordinary he states that 44 of 77 patients were cured, and 10 only died. That if he cured any thing but chronic catarrh in this proportion is incredible. Dr Bush tried the remedy in several cases and considers it a mere poisonous weed. Dr Barton employed it, & concludes that he has not found it of much use, as a permanent cure of Phthisis, except in the cases I have mentioned. I believe the disease in its advanced state necessarily fatal, and when large abscesses are formed and the patient can lie only on one side we may consider it a desperate case. In the Hospitals & Alms House digitalis has been much used. I have seen many cures of chronic Catarrh. but none of pulmonary consumption as a cooperature in incipient Phthisis and in that arising from pneumonic inflamation it proves very useful. Digitalis cannot cure consumption. In speaking of consumption I told you that tubercles are very analagous to the abscess which ulcerate Hunter describes, as occurring without previous inflamation. I come to the conclusion that digitalis is no specific in this disease, and cautioned you against, and trusting to this or any other specific. Epilepsy as far as I have seen which this disease is hereditary it has been incurable.

I never knew Digitalis useful. It has been used in Mania with various intentions, some to evacuate or promote the absorption of serum in the brain, others to reduce arterial action. The best treatment of Mania is that of Dr Rush, and Digitalis forms no part of it. In Hydrocephalus it has been used, and Dr Chapman says in two cases he found it of service, but it is too uncertain and variable in its effects, as to require the greatest nicety in employing it. In its effects it bears but little analogy, with Opium, which even in a small dose produces some effects, but unless we employ digitalis to a certain extreme, the medicine will produce no effect at all, and if you do it produces a sensible operation, on the heart & arteries, or on the brain or stomach we must stop. There is another solid argument against using it. In hydrocephalus the disease requires more prompt evacuations and we have not time for it to reduce the pulse. It is more permanent in its effects than other narcotics. In Rachitis & Gout, it has been employed but I cannot, imagine how the remedy is or can be useful. You see I am by no means partial to the empirical use of digitalis and the exaggerated encomiums which have been lavished on it, should always teach you to be on your guard against trusting too much to the enthusiastic praises of new remedies. I cannot speak of its external use from my own experience. Goldson says it may be used with Acetate of Potash, but is less active as a diuretic in this Bath employed, 1 oz to 1 pint of boiling water adding 1 oz of spirits and gave 5t gutta as a dose. I have no experience with it & do not like to see it used as a diuretic. Scilla Maritima. Squills. The medicinal application of Squills as an emetic have been already stated. Under this article are to be considered its powers as a diuretic. Dr Cullen says it has no specific action on the kidneys, but stimulates all the secretions. Its primary operation is stimulant, but by its irritation it reduces the pulse very powerfully. Its diuretic effects is not inferior to that of Digitalis. In every form of dropsy it is a valuable remedy, but I have succeeded better with it in Ly Dropsy than in the other forms of the disease probably because it is less complicated with organic affections. The experience of a number of my medical friends of high standing, are also in favour of its superior efficacy in hydrothorax. I employ it in substance dose 5 to 7 grains

I have generally given it rubbed up with nitre, which facilitates the pulverization. It is occasionally given in pills with gum ammoniac or with castor oil. I generally commence with 1 gr. on the first day & gradually increase the dose, but have never in the entire practice of squill been obliged to give more than 4 or 5 grains at a dose, some recommend it in larger quantities, in order to excite vomiting. Dr Home gave 10 gr. with 18 gr. nitre and declares that its evident effects on the stomach and bowels is necessary to produce its diuretic operation. Cullen entertained an opposite opinion. I have never seen squill powerfully diuretic unless nausea was produced but I cannot decide whether it was necessary or a mere evidence that the medicine was employed to a sufficient extent. Squill is sometimes given with Opium, as when purging or griping or when it nauseates. But the most important combination of this remedy is with calomel. Cullen was opposed to this combination, because calomel purges, which he considered incompatible with its diuretic operation. But the most extensive experience has settled this point and proved that in dropsy especially, in cases of hepatic obstruction, it is superior to all other diuretics. If it is necessary the purgative effects of the remedy is to be restrained by opium. Squill is sometimes excited by it, and frequently produces beneficial effects. I generally give 1 gr. with each dose of squill. But in some cases only a half grain is to be given. It is thought by some that calomel useful by stimulating the absorbents, so as to favor the direct diuretic operation of squill. But if such is the case there is no need in the latter remedy, it is unnecessary. The order for every diuretic must first evacuate the bloodvessels and this evacuation excites the absorbents to take up water from the cavities. I have been so well pleased with the remedy, that I do not hesitate to recommend it to you and am happy to state that in hydrothorax, it will more frequently cure than any other remedy. This combination is further well adapted to the treatment of dropsy connected with obstruction of the liver or neighbouring organs. When it frequently is, with obstruction of chronic inflammation of the liver or neighbouring organs. When the mercurial preparations or cathartics purging as this impedes the diuretic action of the squill, mercurial friction may be substituted

Copaifera Officinalis. Balsam Copaiba, Balsam of Copaiva. Is a resinous juice obtained from a tree a native of the Spanish west India islands, and in some parts of South America. It goes to a large quantities from inducing trade into the trunk. The juice is clear and transparent of a whitish or pale yellow colour, an agreeable smell and a bitterish taste. It is usually about the consistence of oil or a little thicker when long kept. It becomes nearly as thick as honey retaining its clearness, but has not been obtained to grow dry or solid, as most of the resinous juices do. That from Brazil is the best as it never grows opake unless adulterated. Soluble in alkohol and the essential oils. It stimulates the kidneys promotes secretion and communicates to the urine a violet odour. Dose 30 gutts 3 times a day always intended to 40 gutts. And may be gradually increased to 40 gutts. It is a disputed remedy in regard to the system, but generally gives satisfaction if it does cure it is not so much owing to the medicine, because in many cases it will wear itself off. We should have not deviate from the golden rule but attend to the state of the system. If there is inflammation with fever, venesection sometimes purging is always necessary. So is the antiphlogistic regimen. Sandelwood oil and Copaiva is recommended with other remedies. A decided administration of injections in the same spirited by Copaiva in the early stages are the remedies, when given as I have stated without regard to the system I have never seen, Ardor urina, Phymosis, hernia humoralis, Chordee to be reduced. Give 30 gutta 3 times a day, or 40 gutta twice a day, with gum sugar or molasses.

Additional Remarks. Give the Balsam Copaiva, early in mild cases I have given it as early as the third day, purging has alone cured it, given with sugar or molasses.

Lecture 31st

Oil of Turpentine. Is a resinous juice from the Pinus Sylvestris, Colorless, is of a slight pungent taste, slightly soluble in alkohol. It acts on the kidneys.

Rose ℥ ss ℥ gutta, with Sugar or Molasses. I have given as much as a teaspoonful as a dose, the common size is from 10 to 15 gr. with an equal quantity of the Arabic. This article is often used when fully equivalent for fail. given 3 times a day. Polygala Senega. The root of the plant used is a perennial, growing wild in north America particularly in Virginia & Pennsylvania. This root is usually about the thickness of a little finger, various, knotted and contorted, and appears as if composed of joints, whose name it bears (Rattlesnake) The active part of the root. The bark is the tunicated, very hot & pungent. It has not smell. In 1793. Dr Tennant of Virginia, recommended it in the bite of the rattlesnake hence its name. Dr Baton cured one case of universal dropsy in the Penn. Hospital. Dose from 10. to 30 gr. and gradually increased if the stomach can bear it. The infusion is made in the following manner ℞ Senega ℥i. Boiling water ℔ss. Leave it to stand ½ an hour. To a child of 5 years the dose is a decent teaspoonful. ℥ss to ℥ss. to an adult. It has been much used in Pneumonia, but can not do much good unless preceded by much depletion. Dr Archer of Maryland first used it in Cynanche Tracheali. I find it very convenient to exhibit to children. Where Bark or an emetic or cathartic. It does good upon general principles in this disease. Dr. Barton used it in Chronic Rheumatism, it has been used to relieve strangury from blistering, I have relieved strangury from blisters, with barley water or Gum Arabic better than with this. Dudy. Apium Petroselinum. Parsley. Every part of this is supposed to be a powerful diuretic. The decoction of the root is the part which is used. The seed is equally good, it is used in dropsy, and it is well adapted to the ordinary suppressions of urine. It effectually relieves the suppression, ordinary suppression of urine. It effectually relieves the suppression of the bladder for which we should use a decoction of the plant. Cantharides from the Animal Kingdom Spanish Fly. This insect is collected from the leaves of certain plants in Spain & Italy from which it is shaken, they are first exposed to the vapour of vinegar, or are then dried in the sun. They are of a rich lively green and yellow colour.

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Have a faint unpleasant smell, and a taste slightly acid. The active matter of Cantharides, inflaming and excoriating the skin and is used as the basis of the common vesicatories, it appears to have a peculiar determination to the urinary organs, as even from the external application of the Cantharides internally administered, a strangury is sometimes induced, and a small dose of the Cantharides internally administered acts with much violence on the kidneys & bladder producing inflammation & a discharge of bloody urine inflammation of the bowels, fever in excess, Delirium & death. The Tincture is made — ℞ Cantharides - ℥ss. Alcohol ℔ss. Mix & digest for 7 days & strain through proper. Dose 5 to 10 — to 20 gutta, 3 times a day and gradually increased. Dr. Stamy Hydrophobia it has been used. Dr Chunie Gonorrhoea & Leucorrhoea it is useful. Dr Robertson says it in the following manner in these cases. ℞ Cantharides ℥ss water ℥xl. Mix a tablespoonful 3 times a day, gradually increased. When the matter becomes thicken, demulcents may suppose that it commences to produce good effect, but if it does not we might go on increasing the dose. I have known a Dr a Citizen of this city to give 1500 gutta in 24 hours, the consequent inflammation of the genital organs. Dr. Inflammation fever by creating another disease it was found by Dr Hobbs and it is stopping as did also Dr Barton. It acts as a diuretic in dropsy. Dr Hobbs it has been said to be a specific. ALL ALL ALL CS.

All works on Materia Medica and the

Can a class of Lithontriptics, there are defined such medicines as breaks down or destroy the stone in the bladder. I am sure such medicines are rarely (if any) to be found. In consequence of which Dr Pearson & Barton, have thought fit to alter the term. I cannot think of retaining the term Lithontriptic which tends to mislead the student, & shall therefore substitute the term anti-lithic, these designate such articles, as relieve or alleviate the symptoms of calculus, but in some instances prevent by a peculiar acrimony of the urine the formation of the disease, in which they are used, when any solid bodies passes into the bladder, it serves as a nucleus and acquires concretions, of different laminæ, thereby forming a calculus, or stone. Calculi are rarely formed, without a nucleus, & a drop of blood falling into the bladder caused by a blow, wound, &c. any extraneous accidently falling in forms a nucleus. The discoveries of modern chemistry prepared for, in discovering the substances

of which calculi are composed. The principal substances are a uric acid, urate of ammonia, Phosphate of lime &c. (vide Thompson's chemistry) The order of my arrangement, now leads me to speak of the signs or symptoms, which denote the presence of calculi. 1st Fever, this is not always present, pain in the region of the kidneys, frequent discharge of urine, with vomiting, stupor and retraction of the testicles, urine with sudden suppression, followed by a flow of sabulous or mucous matter, accompanied with pain in the perineum, and laying my, it is proper to observe how we are to distinguish, between this & diseases of the prostate gland, in the last riding & gestation are borne without experiencing excessive excruciating pains, excited in calculus, there is no pain so terrifying as that of calculus, & scirrhus, of the prostate gland except the passage of gravel stones from the liver, the existence of calculi may be some times known in children by the form of the penis from the continued irritation the child is induced to handle it continually, which causes an elongation of the part. Calculus lays in some instances the foundation of hectic fever, here he related two patients who died of hectic fever in whose bodies calculi were unexpectedly found, the pain is imputed more to the state of the urine than to the peculiar form of the stone. Calculi are found of various substances as before mentioned, many of which are capable of being dissolved, by certain agents out of the body, & the probability is that we have certain medicines, which will dissolve them partially in the bladder, which will effect were internally administered, though their palliative, they will alleviate the symptoms of only as calculi, but will not act as lithontriptics, potash which is frequently employed in calculus never have I seen it dissolve the calculus, it palliates the symptoms, a case related by Sir Everard Home, a patient who took potash in large quantity, was relieved by its use, yet it did not act as a lithontriptic, finally the patient died & on dissection, 350 calculi (small) were found.

They are certainly serviceable when formed, & of preventing their formation, when the system has a tendency thereto. more recent investigations have still further extended our knowledge of this subject. it had always been known that urinary calculi are not of uniform appearance and quality & Modern researches have proved that they are of very different chemical constitution and his experiments have been confirmed by others, he has described 4 kinds of calculi 1st Uric acid calculus, 2 Phosphate of magnesia & ammonia or fusible calculus 3 oxalate of lime or mulberry calculus 4th Phosphate of lime or bone earth calculus. Particular Antilithics. It is probably owing to want of care in the selection of those remedies & ignorance of the substances forming the particular calculus that we have been hitherto so unsuccessful in our attempts to dissolve calculi, it is yet doubtful whether we possess any such remedies, but I am inclined to believe that we possess any such remedies as strictly speaking are antilithics. My conviction arises upon 2 grounds 1st we are confident, we possess substances which act as solvents in the calculi out of the body. 2nd Some of these solvents, reach the bladder without any peculiar action on other parts of the body. No substance enters the system, or circulation in its primitive state, it is subjected to the process of animalization, and its original properties are changed but when it becomes an excretion and is removed beyond the sphere of animal power, as for instance when it arrives at the bladder, it is thus subject to ammonia & is regenerated I am convinced of this, no substance in its primitive state has been found in the blood but frequently in the excretion as milk urine &c.

Lecture 32nd

Principle Antilithics. Gastric juice. Doctor Murray found by experiment that the gastric juice of a hog, or dog, was more than that of any other animal, after repeated injections into the bladder of a calculous patient in the Penn Hospital, it was followed by the ejection of large pieces of calculi (quantity) & sandy matter. The gastric liquor remains occasionally in the bladder. Whenever it was certain no deposition of sand was found in the urine (vide his Therapeutics on this subject). Alkalies have long been known as powerful remedies in the symptoms of stone. Some very ancient contained that caustic alkali dissolves calculi and that they may be given freely to patients, nor is they all by their continued use the urine becomes sufficiently alkaline, to dissolve stone out of the bladder. The difficulty is the stomach and bladder become so affected by these remedies that we are obliged to discontinue them before the solution is accomplished, perhaps they act by changing the lithic diathesis and by their vacuation. Do not appear of chemical nicities, which have cast into pathological disposition. Doctor Murray fears the use of alkalies, may saturate the excess of Phosphoric acid, which is necessary to keep the urine in a state of solution, and hence he considers the soft extent of calculi, the use of alkaline remedies as the effect of additional precipitation, and not of solution. I do not concede to this reasoning, because it rests on unfixed data, and is opposed to the relief which is experienced from their use. One of the ablest chemists, found in urine alkali in a disengaged form and also phosphate of lime in solution. Clearly shewing that their elements do not unite according to the established laws of chemistry (or rather chemical action), that the bladder is not a retort or a laboratory of chemical decomposition.

Potash. Experience confirms the efficacy of potash in calculous complaints. The dose is from XV. to XX. grains, twice a day. The pure alkali in a state of solution (aqua Potassæ) has been given in a dose of 15 to 20 drops morning and evening increasing this gradually as far as the stomach can bear.

[illegible] nausea. A solution of potash may be saturated with carbonic acid, and then in this form the super carbonate of potash water already noticed affords the most effectual palliative in cases of urinary calculi. The relief obtained from it, appears to arise from its neutralizing the free acid in the urine and thus rendering it less irritating. From 12 to 24 oz is taken in the course of the day and it has the important advantage that from its mildness it can be obtained for any length of time without reluctance. The sub carbonate of potash is also used as an antilithic in a dose of 15 to 20 grains 2 or 3 times a day but the super carbonate is in my opinion far in preference to the sub carbonate. The super carbonate of pot in bottles well closed. Dose 4. 5. or 6. wine glasses full in a pint containing 8 or 10. grains. A case related by Dr Cullen shows a patient who took potash to a large extent, was relieved by its use, yet the alkali only acted as antilithic. The patient died & on dissection 35 calculi were found (small calculi) if the alkali could have acted as a lithontriptic the patient would not have died of calculus. **Soda**. Like potash is used as an antilithic. Should be given in water super saturated with carbonic acid or it may be given in pills, in order to do this the soda should be first effloresced and in combination with Gum arabic or other substances proper for forming a mass. Soap is given as a lithontriptic it acts principally on the alkali it contains, it is nauseous in the highest and inefficacious. **Aqua Calcis**. This is a very good palliative, it should be given in large quantities, not less than a quart in a day in calculous complaints. Mrs Stevens of London who had a nostrum for calculus was given a high premium for the disclosure of the composition by the British Parliament. The basis of this nostrum or composition is found to be lime, of the lime water, a wine glass full in milk should be given at a dose: this is the best mode of administering it. It is particularly beneficial in all cases of nephritis combined with affection of the stomach, as dyspepsia acid eructation &c. **Magnesia**. As a primary earth, the history was given of it when speaking of cathartics.

Mr Brand introduced this remedy, his object was to prevent the formation of uric acid in the kidneys. When this abounds a dr. night & morning is useful, given with lime water. Mr Brandis & I have gently relieved many, some of whom had taken alkalies, without relief. They are subject to excess of uric acid, which is manifested in their urine by its particles and by the other symptoms of gravel. But gravel is a very frequent complaint & rarely has any connection with calculus, they occur in very different ages & under different circumstances. One an affection of every the other only of old age & usually of intemperate habits. I believe that in gouty or gravelly cases magnesia is an extremely valuable medicine, but not in calculus, & here I still believe the alkalies are preferable. Mineral Acids. Nothing more decidedly proves the difference of composition of urinary calculi than that articles of opposite properties, should alike relieve this disease. Muriatic Acid. of this the dose is XXX gutta at the commencement increase to I. 3 times a day in one case, the patient was cured after taking ℥ij the sediment collected was a buff powder. Nitric Acid the dose to XI. diluted with water every 2 hours till a sediment appears. it should then be continued 2 a day for about 8 month. Opiates should be given to relieve pain & mild purges to keep the bowels open. The nitric is more powerful than the muriatic acid. It should always be remembered that as calculi are composed of different substances, we should vary our medicines till we find the remedy adapted to that peculiar calculus with which the patient is affected. I shall now proceed to carbonic acid, agreeably to the experiments of Dr Robert Pearson Saunders & others, the continued use of water impregnated with carbonic acid, diminishes the size of calculi in the bladder & has a tendency to dissolve them. it has also been proved that the persons (their urine) taking fixed air will dissolve calculi out of the bladder

I can say little from experience on this subject. I have in the first in the form of Seltza water, in gravel & Nephritic cases (affection) with a drantage. It may be introduced into the system, in the saliva or we may give the carbonate first, following it with the acid so that the effervescence may take place in the stomach. I gave it in the form of Seltza water to a boy of 16 years of age, who was affected with calculus I ordered him to drink the Seltza water, half pint 3 or 4 times a day, in a few days after using the Seltza water he voided 4 or 5 calculi of considerable size.

Lecture 33.

Bitters and astringents are also used as antilithics Uva Ursi. (Whortle berry) Grows wild in Europe & North America the taste of the leaves is astringent followed by a bitterness. They are powerfully astringent striking a black colour with the salts of Iron. This article does not produce any change hardly — scarcely upon the pulse nor on the system at large. Dose ℞ of the powdered leaves Dr Bartons dose was 6 or 8 grs. 3 times a day. this is too small a dose Dr Chunnoe Sen.r gave ½ ℥ 3 times a day. this can do no kind of good. Dr Rush showed me a Chemoc prescription. This is very useful to relieve the pain of stone, & especially those who labour under it during the day. it is the best of all remedies. In nephritic cases it is useful. In an irritable state of the bladder, the Uva Ursi is as often successful as any other article, but I also give the Balsam Copaiva ℞ In Hematuria Catarrh of the bladder it will not effect a cure unless we remove the remote cause, but as this article is not irritating it cannot do any harm. In chronic times are very frequently the cause, in vain can we cure it by this article. but in 9 out of 10 cases will succeed by passing a bougie into the urethra In Leucorrhoea we must attend to the catamenia

as I have before mentioned, that cure Urei is particularly adapted to Leucorrhoea this is a most unmanageable disease, in order to cure it, it is necessary to change the secreting action of the vessels of the Uterus which is difficult. There is a species of Leucorrhoea of the vagina, which is cured by astringent injections. General treatment, and if females be single marriage is preferable to particular remedies. Lupulus Communis) Hops as an antilithic, an infusion has been used with advantage. In nephritis a strong decoction of hops, about a pint of which should be taken a day, bully the pain & often cures. The tincture is not proper in these affections, Malt liquors subjected Dr Barton to gout & nephritis. Harvey ~~nephritis~~ carota. this has been classed among this class by Dr Chapman he has known it to produce a copious discharge of urine & often to relieve nephritic affections. A decoction of the seeds or root is used as a simple infusion, in quantity about 1 pint or a quart a day. the cultivated carrot has similar properties but is not so strong as the boiled I have never used it myself but recommend it from the authority of Dr Chapman. The Alisacea are also of this class. Allium Sativum. (Garlic.) This was formerly recommended as an antilithic, on the urine & is mostly recommended in dropsy I think it a doubtful efficacy as an antilithic

Oleum Terebinthina. first used by Dr Physick dose 10 or 15 Gutta 2 or 3 times a day, with a few drops of oil of cinnamon, but I prefer it with 2 or 3 drops oil of Sassafras. it may be given with any essential oil 10 or 15 gutta with 2 or 3 gutta of essential oil from 2 to 3 times a day. This is the best of all remedies, & Dr Physicks extensive experience of this remedy has also been very successful. to relieve the symptoms of stone as pain &c Dr Physick always makes use of this remedy.

Lecture 34.

Diaphoretics. Sanctorius was of opinion that a person perspired 15 times more from the skin than from any other excretion, but this is incorrect. Diaphoretics differ only in degree of force & therefore need no subdivisions. The evacuations are poured out by the vessels of the true skin. It is composed of gluten, muriate of ammonia & the matter discharged, may I think be sometimes changed as the urine, bile & in small pox it is probably changed. In Dysentery & when the excretion is extremely changed & the skin nearly insensible, sweating sometimes takes place. Cullen's opinion therefore is incorrect. Diaphoretics act, 1st by depletion, by exciting the fluids. 2 by filling the superficial arteries with blood, by abstraction & from some other part 3 by exciting a new action tends to abstract disease from some other part. in repelled eruptions, or suppressed secretions, the blood vessels have discharged. External heat, either by clothes warmed or flannel &c. being a non conductor prevent an evaporation. In Chronic cases, as chronic rheumatism. Flannel should be worn next the skin as the Profession of practice of Physicians will tell you to prevent a sudden check to perspiration is highly injurious, as patients generally tear off the wet clothes if not closely watched. I have often seen patients that were destroyed by this neglect. you are to avoid purging them you and them as the patients getting rid of bad, matter from the suppression of the discharge suffer considerably the patient should frequently change his clothes as the filth of perspiration is more injurious than any other

Application to Diseases. 1st In Fever Cullen divides continued fever into Synocha Typhus & Synochus Cullen who during 40 years practice has never seen a continued fever. I have never seen one I believe that no such fever occurs.

They all had more or less of a remission & intermission

When the temperature is about 105° nothing can excite sweating they are given during the remission & intermission

Hoch Lind gives them to relax the extreme vessels they 1st diminish the force of the circulation. 2 by exciting an action on the surface tends to abstract from other parts. Respecting Spasm of vessels (the) is full of error, but the practice is correct. When morbid action is only about 103° Diaphoretics must only perform part of the plan of treatment. Venesection purges sweating of a cute, inflammation Phlegmasia. Salina Diaphoretics, as the antimonials. In chronic Rheumatism the more stimulating diaphoretics are to be used. In regular Gout when a retrocession is not to be feared, diaphoretics may be used. In Peritoneal inflammation, where the lancet cannot be pushed far they are highly useful.

Lecture 35.

In Dysentery which is a genuine species of Phlegmasia, a genuine inflamatory affection of the bowels. Cold is the exciting cause of the Physick say that cold is the most frequent cause of cholera, it is said that unripe fruits are a frequent cause of Cholera. This may be the case in one of 20. Therefore bear it in mind that you are to determine to the surface. You will find that mucilage of G. Arabic & Lime water, will be retained when others will be rejected, & avoid cold and your will cure your patient, avoid irritation sometimes injection, be come necessary, as starch Lin-seed tea &c become necessary under certain circumstances. If these measures are used Tonics are useless. but give food of easy digestion which will be the best tonic. Dr Chapman found Black berry very beneficial we shall treat of it under head.

The Sympathy is very strong between the surface & the intestines, a flannel shirt therefore should never be neglected in such cases as chronic Diarrhoea &c.

In the class neuroses of Dr Cullen Diaphoretics are not useful, as Coma, Apoplexy & in Mania they form part of the Phlogistic regimen (antiphlogistic rather)

In Diabetes. The proximate cause of this disease is not known. a common symptom is where more urine is discharged than the liquids taken in. Cullen says that in Scotland it is never cured in this country it is often cured by treating it according to the system. Dr Physick had 4 cases which he cured by following Rollos plan, animal food was allowed & Dr Ferriar's prescription is. Viz

℞. Peruvian Bark 20 grains
Uva Ursi --- 20 grains
Opium --- 1/4 grain

and this to be given 4 times a day with the occasional use of lime water they were cured. diaphoresis may be used, when the skin is dry & not else.

Particular Diaphoretics. Duncan divides them into 5 or 6 classes. This division is useless as it does not assist us in our inquiries. Bricks made nearly red hot & then plunged into vinegar, & wrapped in old flannel & applied. Dr Jennings contrived an instrument which is curious and can be separated into 4 pieces but it is inconvenient. The vapour bath as a diaphoretic is also very inconvenient, because the patient must be taken out of bed. more of this hereafter. Sand, Bran, Chaff, ashes, Cut Straw, heated in a bag and applied, is sometimes used. the same Objection attends this. Bladder filled with hot Milk. Water &c is sometimes used. Warm bath is sometimes used by practitioners, but is also inconvenient as a diaphoretic. Pediluvium has also been used. Cold water taken into the stomach occasionally produces diaphoresis

Lecture 36

Emetics may be managed as to produce diaphoresis or sudoresis. Antimony. a sympathy appears to exist between the stomach & the surface of the body, in consequence of which the state of the one is to a certain extent communicated to the other, the nauseating effects of emetics for example, being accompanied with diminished action, at the surface this effect is apparently produced, by the preparations of antimony and some of them particularly the ox-ide & antimony, with phosphate of lime & the tartrate of antimony & potash are hence employed as diaphoretics in febrile affections. the former is given in a dose of from 5 to 10 grains, repeated every 3 or 4 hours, until its operation as a purgative cathartic or emetic is produced Dr Kuhn of this City, an old practitioner has seen James powder tried in many cases. (the diseases in which it is principally employed with no great success. he prefers Pot. Emetic. he has for many years not prescribed it. the latter (Tartar emetic) being given in a dose of 1/12 to 1/4 of a grain. in a similar manner the action of both is aided by warm diluents & sometimes that of the tartrate of antimony & potash, is rendered more certain & powerful by combination with opium. the Sulphuret of Antimony. levigated has been used as a remedy in some cutaneous diseases. & chronic Rheumatism & has been supposed to operate by increasing the insensible perspiration. Antimonial wine given in a proper dose, will promote perspiration, It is made in the following manner

Antimoniated Tartar ——— ℈ij.
Distilled water boiling hot ——— ℥ij
Spanish white wine ——— ℥viij Dissolve the antimonial tartar in the water, & then add the wine, this is a solution of the tartrate of antimony & potash in wine. In preparing it with vitrium Ammonia or glass of antimony, a portion of the glass

is dissolved by the ℥ij Tartrate of Potass contained in the wine, & as the quantity of this is variable so also the quantity of oxide of antimony dissolved varies & therefore the preparation ought to be entirely rejected, since its strength can not be known, the dose is easily graduated to a very young child of 1 month old 1 drop from 2. 3. to 5 Gutta under 5 years, 10. 15. or 20 gutta is the proper dose for an adult, I prefer giving the Tart. emetic in solution. 1 gr. Tartar emetic dissolved in water. By Sir John Pringle it was recommended in Bilious fevers & Hysentery. When antimony was first used in fevers it was kept as a nostrum. When you prescribe it do not inform your patient of the same as I have seen a person, when the very name of antimony was mentioned produce vomiting. In Rheumatism. It is highly useful in form of a diaphoretic James powder is very much used in this case. The cases in which the use of antimony is contraindicated, is gout, dyspeptic patients cramp in the stomach &c. The next emetic as a diaphoretic is **IPECAUANHA**. Dose ½ gr or 1 to 2 grains every 2 hours, acts as a diaphoretic. In combination with nitrate of Potass in proportion of ½ grain Ipecac to 8 grs nitre forms an excellent diaphoretic it is most frequently used in form of pulvis. Ipecacuhanna et Opii vel Dovers powder, which as you all know is a powerful diaphoretic. Is also used in the form of Ipecacuhanna wine, which is made in the following manner. the Rad Ipeca bruised - ℥ij

Spanish White wine two pints
Digest for 7 days and strain

Dose 30 or 40 drops to an adult, emetics & diaphoretics are contra indicated in an irritable state of the stomach & alimentary canal

Opium. In a pretty large dose produces sweat

particularly when its operation is promoted by delicacy & external warmth it is difficult however to employ it alone, as a sudorific from its narcotic power being necessarily exerted at the same time. But by combination with antimony or Ipecacuhanna a modification of power is produced more important perhaps than any other arising from combination of remedies. The narcotic power of Opium is in a great measure prevented. The nauseating effect of the Ipecacuhanna or antimony is also diminished, & we obtain a sudorific more powerful & certain than any other. In the combination with Antimony 30 gutta of antimonial wine are usually added to 75 gutta tincture of Opium. The combination with Ipecacuhanna is still more powerful. It is an Official preparation. Dover's powders consist of one part Opium & one part Ipecacuhanna & sulphate of potash eight parts being rubbed together into a fine powder. The sulphate of potash renders this more easy by dividing the opium and lessening its acrimony. Various articles have been used as a substitute for the sulphate of potash. I see nitre for a substitute as it co-operates with the diaphoretic effects of the other articles. Some substitute Cog. sugar & Gum arabic for sulphate of potash. In Dysentery we may substitute chalk for Sulphate of Pot. ash. The powder is to be given in the morning according to Dr Cullen. The powder is best taken in the form of ~~powder~~ bolus or in a wafer. I give it in currant jelly. no drinks to be given until sweat break out, then warm diluent drink are proper. Secure the patient from cold place him in flannel care is to be taken to avoid the aplication of cold, either by the admission of cold air to the surface, or the drinking of cold water, while the sweat continues or for some time after it has ceased. Bottles filled with warm water are to be applied to the soles of the feet.

warm bricks &c will promote the operation of Dovers powder. You must particularly direct the nurse to watch the bed clothes, as if this is not strictly attended to, the patient is apt to take cold. When a sweating is to be checked, it is best done by drying the surface, removing the patient into dry flannel, & allowing him to expose his hands & arms to the air. The patient after sweating ought to keep his room, the first ten days. This is the medicine which is uniformly employed, when copious sweating is to be induced as in acute Rheumatism, in Anasarca according to Mr Cullen & in every other disease in which this indication is to be fulfilled. Medium dose 10 gr. if it fail in producing sweat, other 8 gr may be given, at the end of an hour, & sometimes even 3 is necessary to give larger doses. In Gout much employed but it is certainly injurious in this disease. Dr Browns case gentlemen ought always to be kept in view, it is unnecessary to enlarge on this subject, let us proceed to the consideration of the neutral salts. Acetas Ammonia. All the Ammoniacal salts are supposed to have a diaphoretic power. The acetate is the one which has been principally used. Solution (aqua Acetatis ammonia) having been long celebrated under the name of Spirit of Minderer (Spiritus Minderi) as a diaphoretic in febrile cases.

Vinegar ℥i. Saturated with carbonate of ammonia. the carbonic acid being disengaged with effervescence, the acetate of ammonia remaining in solution 1 oz every hour or 2 saturated with Lemon juice. it has antacid property, it prevents acidity, though when you wish to prevent acidity you give

Chalk Magnesia &c. Its operation is promoted by copious water or diluents and the sweating regimen as it produces no increase of vascular action, it has been supposed well adapted to exhibition in inflammatory fevers, as Synocha & acute Rheumatism & yet in such cases that it is usually employed. **Citras Ammoniæ**. Saline mixture, Lemon juice neutralized by potash has long been employed as a refrigerant, in fever where neutralized by ammonia it is supposed along with its refrigerant to have a diaphoretic power. Its diaphoretic operation is sometimes promoted by the addition of a few drops of Tinc. Opii & Antimonial wine. In either way it forms a good diaphoretic. It is much used in Europe but it little used in this country. It is very grateful to the stomach. Lemon Juice 3ij Water 4 oz. Dose a table spoonfull } Salt of Tartar We also sometime, add oil of mint Sweetened with sugar Doctor Mason places Calomel, Submurias Hydrargyri on his class Diaphoretics. It has little effect but I do not wish to place it on the list of diaphoretics. **SULPHUR**. It has been remarked to pass off by the cutaneous respiration with some increase. It has been supposed of the insensible perspiration. Hence has been explained the advantage sometimes derived from it in habitual dyspnoea & in chronic catarrh. **Camphor**. Has been employed as a diaphoretic in acute Rheumatism, in different forms of fever & Dr Cullens mentions its beneficial effects in stroke of the exanthematata particularly small pox in a dose from 5 to 15 gr. Its operation as an diaphoretic is not sufficiently certain. however when it is given alone. Sometimes it is combined with nitre with antimonials &c. &c. &c. &c. &c. &c. &c. &c.

Lecture 37th

At my last lecture I mentioned several articles, as Diaphoretics. I shall resume the subject this day. I shall speak of the Eupatorium Perfoliatum. This plant is known by the name of Thorough stem, Ague Weed, Bone set & Indian sage. It is one of the remedies of the indians & acts powerfully as a sudorific and emetic. Is employed in intermittents & other fevers, either in decoction or the leaves in powder every part of the Eupatorium may be advantageously used, although the flowers appear more active. a watery infusion of the leaves is a disagreeable bitter, and the flowers are deemed by Doctor Barton superior in this respect, to those of anthemis nobilis. This is used in intermittent fevers as a tonic. we have better tonics as peruvian bark &c. My colleague Dr Chapman stated in his lectures, that he was much pleased with this medicine in Intermittent fever Dr Barton also highly recommended it. Emetics Mercurial purges Peruvian Bark & arsenick have cured all the intermittents I have seen. my experience in this disease is not very great. This medicine has been employed in bilious fever. In Yellow fever Dr Bostock & several others extol it, in other diseases. I think it possesses as much power as common water in this disease. It is of little value in those cases. In dropsy it is sometimes useful as a diaphoretic when they are indicated. In Typhoid Pleurisy it has been found beneficial. It was much used in that disease.

POLYGALA SENEKA. Seneka or Rattlesnake root Seneka is a perennial plant, which grows wild in E & A. Particularly in Virginia & Penna. This root is cultivated as I have before mentioned

When I spoke of it under another class. Dr Percival of Europe & Dr Dennant have highly recommended it. It has emetic Diuretic & Diaphoretic properties. Dose ℥i to ℥ss pint of boiling water as a diaphoretic. ℥ss this quantity as a Diuretic. **Laurus Sassafras.** This tree is a native of E. A. It is the root which is commonly employed. It is brought to us in long branchiae pieces. It is a soft light & of a spongy texture of a rusty white colour. of a strong pleasant smell resembling that of Fennel, & a sweetish aromatic subacid taste. It affords an essential oil by distil. & yields to water by infusion or decoct. Its flavour & part of its taste it is slightly stimulant & diaphoretic. Its infusion has been drank probably in cutaneous diseases (purely) & in chronic Rheumatism & it is frequently added to decoctions of Sarsaparilla Guaiacum & mezereon probably without communicating any real property. The infusion is very grateful & much used by the vulgar in Spring.

Salvia Officinalis. Sage. The leaves of this shrub have an aromatic smell & a warm bitterish taste. Its aqueous infusion drank warm has been used to produce sweat or to promote the action of sudorifics. The aromatic quality of the sage adding somewhat perhaps to the power of the warm diluents.

Guaiacum Officinalis. S. America & W. Indies. The wood of this tree & a concrete resinous juice obtained by exudation from incisions made in the trunk of the tree are the parts used in medicine. The wood is hard & heavy of a yellowish colour, has a bitter smell & a slightly warm bitter taste. Its virtues depend upon the small quantity of resin it contains. Guaiac. was introduced into practice as a remedy in the treatment of the lues venerea & was at one time even considered as a specific. Its powers are now better ascertained. it is employed merely as an auxiliary & sometimes with advantage, in promoting the action of mercury in the ~~advanced~~ state of the disease (confirmed state) & in alleviating the various symptoms which arise from a protracted mercurial course. It is likewise occasionally prescribed by some Physicians in cutaneous diseases.

in scrofulous affections & in chronic Rheumatism.
The form under which it is administered is always that of decoction. **Formula.** take ½ ℔ of Lignum Guaiacum shavings. 3 gll of water boiled to 2 gll. given ad libitum. Another form in which it is often given called the volatile tincture. ℞. Spiritus Minderi ℥ss. Doctor Chapman gave it in Rheumatism, in the dose of an ounce at bed time. Often given in powder rubbed up with G Arabic or white of an egg. in Dose of 15. to 20 grains. It is sometimes used in gout but without advantage. Dr Cullen assumes the idea of preventing a fit of gout with Guaiacum. But this I do not believe as I have tried it in Gout of the Stomach I mean the vol. Tinc. Dr Barton also used it with good success in Colica Pictonum. By incisions made in the trunk of the Guaiac Tree, it affords a gum resin. This is friable of a greenish or grayish colour & resinous lustre, has an odour somewhat fragrant & warm bitterish taste. It was usually regarded as a G. Resin. but the experts of Dr Brande have shown, that it possess some peculiar properties. wherever it has been regarded as a distinct principle. it is very liable to changes of colour apparently from the action of Oxygen. Its powder is at first a gray colour, but becomes green from exposure to the air & when its solution in alcohol is decomposed by acids, the precipitate assumes various tints of colour. It is almost entirely soluble in alcohol water by digestion or it dissolves a little extractive matter. The tincture of it in Spirit of ammonia is more highly stimulating, than that in proof spirit & is generally preferred.

Daphne Mezereon. Mezereon the bark of this root

So used in Medicine. its taste when it is chewed for some time is extremely acid, but this acrimony is somewhat impaired by drying. it is extracted by water & vinegar. when applied to the skin in its recent state, it raises blisters. Mezereon is a stimulating diaphoretic, which the root was long used as in the Lisbon diet drink, for venereal complaints, particularly nodes & other symptoms resisting the use of mercury. & also given in cutaneous diseases but Mr Pearson of the Lock hospital says, that excepting a case or 2 of Lepra, in which a decoction of the plant, conferred temporary benefit. he very seldom found it possessed of medicinal virtues, either in Syphilis or in the sequelae of that disease. the decoction is made by boiling ℥ij in 3 lbs of water to 2 lbs in the course of the day.

℞ Sassafras
Sarsaparilla
Red Sanders of each ℥ij
Mezereon ℥ij
Guaiacum ℥ss

Doctor Coxe takes
Lignum Vitae ℥iij
Sassafras
Liquorice Root ℥ij
Water ℔ XI

It is said that it has removed some of the primary and secondary symptoms of Syphilis Doct. Chapman mentions it

Juniperus Sabina. Savine. This is an ever green shrub, a native of Tartary & Siberia, but not unfrequently in our gardens. the leaves have a bitter acid biting taste & a strong disagreeable smell distilled in water they yield an essential oil in considerable quantities. Savine is a warm stimulating medicine, capable of producing diaphoresis, & increasing all the secretions but apt to excite hemorrhagy particularly from the uterus, it is said to be an anthelmintic & to be very efficient in the cure of gout. Internally fresh leaves from ℥ss to ℥i is given in conserve externally applied as a rubefacient.

OF Sialagogues. Are those substances which increase the flow of saliva. this may be effected either by the mastication of substances! a chip, a piece of paper nay a single idea will produce that effect. but I will confine myself to noticing 1 or 2 only, however Dr Barton has spoken of several. tobacco posses the effect not in a small degree as you all know. Or by the internal exhibition of certain Sialagogues. & in the strict sense of the term Mercury is the only Sialagogue. HYDRARGYRUS. Quicksilver, is an article of the greatest moment in Medecine. Its chemical history ought to concern you. for there is not a clop of diseases in which some of its preparations are not used. great is the science of Chemistry in drawing from the earth, a medicine of so much power. It was not known to Hippocrates. Mercury in a crude state appears to posses no activity as a medicine. It was a fashion in the British Ladies to take it Dr Barton says it fell into disuse by the Ladies letting it fall in the Ball rooms &c. There are however morbid consequences which result from obtaining it in the mines. the Miners only live a few years & generally die of some nervous disease. a crew of an english ship were salivated by the bursting of the kegs which contained the mercury bursting on board

Lecture 38th

At my last lecture I spoke of Mercury to day I shall resume the subject again. Mercury in a crude state passes through the stomach and bowels unchanged, but in a state of minute division it is not known whether it undergoes any change. After boiling quick silver in water it imparts a metallic taste to it. Its effects in salivating are so great as to destroy deglutition. Its effects are very different to different constitutions. I have known gr of corrosive sublimate to produce a salivation. I have seen 1 patient die from taking 8 of our antimonials, so great was the action of the mercury on his constitution, in other instances, great quantities are taken without producing any of these symptoms, one of the strongest symptoms in detecting salivation, is a livid line, round the edge of the gums. In children it is acknowledged that mercury should not be given under 2 years of age, with a view of salivation as it seldom salivates, & often dreadful consequences ensue, by the administering it with the intention of producing ptyalism. Of MERCURY. There are many preparations of mercury, of which I will only notice a few, as the Blue pill Plenty's solution & the blue ointment. The blue pill is made by triturating mercury & honey, with a little chalk which I always add.

℞. Quicksilver — ʒ ij } I add the chalk to hasten
Conserve of — iij } the process, divide the mass
Pulv. Liquorice — ℥ i } so as to give 1 gr. at a dose

I consider the preparation in the dispensatory as a very useful one (excellent one) but I merely add the chalk for the purpose above mentioned or Plenk's solution see beginning of these notes.

Blue Pill. Is made by triturating quicksilver with Rhubarb or prepared chalk, I prefer chalk it is sooner made, will triturate mercury better than any other article. Aoth Cope makes his blue pills in this manner ℞. Purified Quicksil. ʒ ij
Rub the quicksilver with the conserve of Roses, until the ~~xxxxxx~~ globules disappear. Then Adding Liquorice root. vide dispensatory. (I prefer Chalk preparation) I take for instance 60 grains of quicksilver

Conserve of Roses ʒ iij
Liquorice finely powdered ℥ i

Chalk 2. S. mix pills LXIV

Mercurial Ointment. Unguentum Hydrargyri It is made of various degrees of strength. The experiments of Dr Fordyce prove, that the globules of mercury are seen in the pores. — Some writers say, that the ~~g~~ property of Plenk's solution & blue pill, depend on the Oxygen they contain, now this allis correct that the Oxygen wont salivate, without mercury there is not a doubt. Mercurial Ointment is made as followed. Quicksilver & hogslard, of each 1 part, Rub the quicksilver thoroughly in a mortar with a little lard untill the globules disappear, it may be made also with a double or triple proportion of Quicksilver

The only use of the lard is to facilitate the operation of the Quicksilver as it is called, and the introduction of it through the cuticle. These purposes are perfectly obtained from this preparation and any larger quantity of unctuous matter merely weakens it, and renders it necessary to continue the friction longer. This like all other mercurial preparations obtained by trituration, was at one time regarded as deriving its efficacy from the mere mechanical division of the metal. There are reasons for believing that in all these preparations, the mercury is oxidated, & that their action on the system depends on this oxide. There are even additional grounds for a similar conclusion with regard to mercurial ointment. Unctuous matter appears in general to promote the oxidation of metals, by the action of the air, as is exemplified in the green rust which copper speedily acquires, when coated thinly with grease. The improvement of the ointment from keeping, affords a similar presumptive proof. The ointment is when newly prepared of a light bluish grey colour but when it is kept some time, it becomes of a much darker colour probably from the oxidation of the metal becoming more complete. It has ever been supposed that quicksilver in the preparation may suffer a farther change

Unctious matter & more especially that of animal origin, is known to become rancid from the action of the air, and this rancidity appears to be connected with the formation of an acid, probably the acid produced from fat. The Oleic. This change may take place to a certain extent during the trituration. & still more when the ointment is long kept, air may promote the oxidation of the mercury, while any acid that is formed may combine with the oxide according to this view mercurial ointment will consist of unctious matter, in which is diffused oxide & sebate of mercury, with a portion generally of metalic mercury its activity of course depending on the form. Rancid fat it has been found extinguishes the quicksilver better than recent fat, & may be allowed as by the action of the metal, the rancidity of the fat appears to be corrected. Mercurial Ointment is the form under which mercury is introduced into the system, by external friction. It is a mode employed with advantage, in cases, when the preparations administered internally, are liable to be determined to the intestines, so as to occasion griping or purging, or when it is necessary to introduce a large quantity of mercury expeditiously into the system, the general mercurial action being thus induced. It likewise sometimes employed in some local affections particularly bubo. Ʒi rubbed morning & evening.

(n the modus Operandi of Medicines. of the operation of Mercury) Various opinions have been advanced on this subject. the particles of mercury were supposed to enter the bloodvessels, & thus pass through the circulation & render the mouth salutary & this way prove serviceable but it has never been detected in them. Paracelsus supposed it to evacuate the morbific matter out of the system. through the medium of the salivary glands Cullen says mercury cures by its evacuant operation, and if its cures by an evacuant power Emetics & Cathartics will cure the same diseases & we would have no occasion for mercury. but this is not the case. Swediaur supposed it to neutralize the venereal virus, by decomposing it. Sir C Bell supposes the same. Sir John Hunter who has ascribed less to his theory, than to his facts. I think him the only correct on this subject He believes that no two actions can exist in the body at the same time, when Mercury cures the venereal disease it does it by exciting a new disease & new action & this by long continuance of the remedy overcomes it. It is the only correct idea we have of the modus Operandi of mercury It has been said that Hunters theory is a compound of Stahl but is it correct. Is mercury ever absorbed from the stomach or intestines? this is a question. It acts by stimulating the part to irritability to which it is applied & from that part it is communicated to another part by sympathy

Sympathy which is only a modification of irritability. It is as vain a Philosophy to affect, that when a globule of mercury, is applied to the Villi of the stomach it will affect a tendon, or when applied to the fine coat of a bloodvessel. Dr Hamilton who has written very judiciously on this subject, says he has often found globules of mercury in the breath of salivated women. yet, again & again has been determined that in retained cases where it was found in the body Dr Mead, Broadwell, Boerhave & Boyle, say that globules of mercury are found definitely in different parts of the body. but it appears from more modern examinations of Mr Bell Cruikshank & others of modern time have examined several hundred persons who had died without taking mercury &c. but they could discover none Mr Physick wrote a paper to prove that mercury is never found in the fluids of the body he says that it is the opinion of many, that mercury cannot salivate without entering the bloodvessels, which experiments with the blood & ~~bloodvessels~~ saliva of salivated patients, which satisfactorily prove, that the fluids were not impregnated, the mind of the patient will sometimes produce a copious flow of saliva, hence it is certain that mercury cannot exist in the system In common cases which it can act without entering the bloodvessels as is commonly supposed.

Dr Physicks Experiments. A Gold piece was put into the blood & Salivia, with change of silver & copper. Charcoal being ignited and added to the Salivia & it could not be detected, also in the Serum of the blood. Dr Warren of Boston whose authority may be depended upon repeated the Physicks experiments with the same results Dr Seybert made experiments on the salivar Serum of the blood. a quantity of Salivia & Serum was put into a flask, in the neck of which was suspended a piece of Gold, & the put over the fire & the Gold remained unaffected, shewing that the Saliva contained not 1 single particle of ~~Salivia~~ Mercury. Mr Hunter says mercury may be supposed to act in three ways. 1st by uniting with the poison & chemically decomposing it. 2 By evacuation 3 By producing irritation in the constitution, which counteracts the venereal & counteracts it (destroys it) the 2 first we cannot believe. 1st We ~~[illegible]~~ have no proof of mercury acting by decomposing the poison or by Dr Physicks Experiments which never detected mercury in the circulation of the blood. 2 when it acts by evacuation, it has the least effect on the disease, or on the constitution which are exist effected by it. it has scarcely any effect. as well as evacuating by other means, which ought to cure it if this was the case. the poison does not exist in the constitution. otherwise it could not be locally cured.

Lecture 39

Commenced with a recapitulation of the last Lecture. We shall now enter upon the consideration of the different preparations. Plenks Solution, the blue Pill & Blue ointment have been described. **Ethiops Mineral.** (Sulphuretum Hydrargyri) a Vegum is made by triturating equal parts of sublimed Sulphur & quick silver. This preparation is scarcely used some think it inert. The dose is from 10 to 30 gr I never gave it internally & I believe I never shall.

Hydrargyrum Sulphuretum Rubrum. Cinnabaris Factitia. This is made with 5 parts quick silver & 3 parts of Sulphur. Mix the quicksilver with the melted Sulphur & if the mixture take fire extinguish it by covering the vessel afterwards reduce the mass to powder & sublime it. This is rarely used internally. Sometimes used in fumigation in venereal ulcers, in the nose mouth & throat. If is burnt the fume being imbibed will occasion a violent Ptyalism. It is used in various chronic diseases, as Gout &c. **Calomel.** (Submuriate of Mercury) The Professor of chemistry will give you all the information on the preparation of this article. This is a cathartic as I have already told you, is the most valuable of all the preparations of mercury. The dose as a Sialagogue to an adult is one or two grains every 2 or 3 hours. if this dose purges give opium. In fever Calomel is preferable to any other preparation of mercury. It must always be given in some thick vehicle.

OXYMURIAS HYDRARGYRI.

(Corrosive Sublimate) Corrosive muriate of mercury) This is soluble in water. The dose as a sialogogue is 1/8 1/6 or 1/4 of a grain. 2 or 3 times a day in form of pills, or solution in an over dose produces serious effects. When preparing this or the former in the form of powder, be careful to mix it well as it is of great importance, to triturate & mix the different parts well together. I was called to a Lady who was poisoned with this article. I immediately directed her to drink Lime water If there is a large quantity taken into the Stomach & you dread its baneful effects work out the stomach, by introducing a tube. You must use the old names of these preparations, as I have seen dreadful consequences result from neglecting this.

The Red Oxide of mercury. (Hydrargyrum Calcinatum) is prepared in the following manner. Take quicksilver any quantity, put into an open glass vessel with a narrow mouth & wide bottom. Expose this to a heat of 600 until the metal is reduced. It is a very active mercurial. Its dose is one grain twice a day. It is liable however to produce irritation of the stomach, & intestines, on this a/c it is not frequently used. Mr Hunter used this preparation I can say nothing about it from my own experience.

Red Precipitate. (oxidum Hydrargyri Rubrum per acidum nitricum) Is made by dissolving one lb of quicksilver in diluted nitric acid. 16 oz & evaporate the solution with a gentle fire to a white mass, which being reduced to a powder is to be put into a glass cucurbit & apply to it a fire gradually raised, until it pass into very small red scales

I consider it an oxide with nitric acid, it is so acid as to be altogether unfit for internal use. externally it is applied as an escharotic to ulcers &c being applied either in a finely levigated powder or mixed with lard in the form of ointment. Turbith's Mineral. This has been seldom used as a sialagogue but it has been used as an emetic, but when I want to vomit, I use Tar Emetic. which I find to answer every purpose without having recourse to new articles. White Oxide of Quicksilver (Calx Hydrargyri) The Professor of Chemistry will give you all the information of the preparation of this article, to whom I refer you for the preparation of this article. Dose 2 or 3 gr 2. or 3 times a day. It is generally used for ointments.
Phosphate of Mercury. (Phosphas Hydrargyri) Mix carefully in a capacious glass vessel & add 8 oz of Sulph acid. Water 4 ℔. white calcined bones powdered 14 oz. method of preparing vide Dispensatory. Is a valuable remedy in the hands of a judicious practitioner. Keysers Pills. It is supposed to be a mild preparation of mercury. viz the acetate of mercury & was the active ingredient of the celebrated Keysers Pills. I forbear to wear out your patience in enumerating a long list of mercurial preparations of which I could mention several hundreds. I have done here as in many other places struck out many articles which I consider as useless. For I can assure you I never resort to them when I can get others which are better. I will go on to notice the effects of Sialagogues. In diseases. of their use in Fever.

I told you the Arabians were the first who used Mercury, it is only a few years since its first use in ~~mercury~~ fevers. Dr Warren had recourse to it in an Epidemic, he prescribed it from the commencement of the disease. In the west Indies they appear to have a very different opinion. Moseley's treatment was venesection purging blistering & then bark &c. Dr Christholm used mercury very extensively in fevers. He seems to have been led to this practice by his attending to fevers in which the liver was affected &c. He would commence with 5 gr every few hours, in 1 case he gave 40 grs. in some cases he gave 10 gr every few hours, in which he would salivate in 24 hours. Dr Physick & myself have dissected several hundreds who died of this disease & we determined that the stomach was the seat & shrine of the disease not the liver as Dr Christholm supposed. (note the yellow fever is what I allude to) Some of the practitioners of the Indies, have followed Dr Christholm, & they have gone as high as 250 grs. these are fevers, we will have to trust to our own countrymen. Dr Warren of Boston has written a very excellent work on this subject. The Yellow fever of 1793. of this City, a salivation was found to cure but difficult to obtain Dr Rush says a salivation was found to be the most certain remedy in the yellow fever of this city. he says he has never seen a single case prove fatal where a salivation was effected when it passes off by the bowels, he gave opium. the late Dr Saml Duffield of this city, always

Gave it in combination with opium. he universally gave it with opium. I never seen a person use 1 prescription so much as he did. In the mild bilious fever it has been used: but it is not necessary only in protracted cases. In Typhus it has not been used in consequence of its not being known how to administer it properly. Dr Warren used it in Typhus fever together with blisters. Dr Rush has left his testimonies on this subject. he speaks very favorably of it. In the Phlegmasia it has been successfully used. there is a difficulty in ascertaining how it acts, in these cases we call it an alterative. Dr Hunter says it acts by producing a new disease, greater than the Originae. Chronic opthalmia, & opacity of the cornea, I have cured by mercurial salivation being kept up for some time, in this way I have always succeeded. In Phrenitis it has been used but in those cases venesection purging, Blisters &c. are to be used. If they do not succeed then use mercury. the Dr England practitioners use mercury to relieve pain Cough &c. of Chronic Pneumonia & prevent pulmonary consumption from coming on. they suppose they can use venesection more freely than they have formerly done. this observation is very correct after proper evacuations in this disease, you may employ calomel, it acts as an expectorant, of which many proofs could be selected, on the subject of pulmonary consumption I explained to you in a former lecture very fully. Dr Rush believes pulmonary consumption

to be a disease which affects the whole system, in consequence of which he took up the use of mercury. he has spoken very highly of its use in Typhus & hectic states of consumption (pulmonary) I believe when tubercles have formed it will not prove successful. he was of the same opinion in cases of chronic catarrhal inflammation of the lungs I have no hesitation in saying that it is 1 of the best remedies. pulmonary consumption can be suspended for a few months, but the next time the patients take cold the disease returns. In Cynanche maligna it has been used. In Cynanche tonsillaris it has been extensively employed. Dr Hamilton gave as high as 200 gr. in 24 hours. I can assure you this is a rapid treatment in conjunction with vene section, purging blisters &c. it is highly useful as long as the barking cough continues. in this disease combined mercury. In cases of this disease where death is approaching, Bronchotomy may be used. I tried it in 1 case & found it probe successful. the only 1 I have ever performed. I see there are 2 or 3 cases which were successfully performed in E & England. purging with calomel is one of the best cathartics in all protracted coughs, with which we are acquainted. Dr Archer gave corr Sublimate ij grains dissolved in ℥ij of water in doses of a few drops every two hours untill come on this mixture he has successfully used it in croup —

vide the recipes in the front part of these notes.

Lecture 41

In Rheumatism Calomel has been used. & may be so managed as to prove useful by acting also Sialagogue. Dr Donald Munro has recommended Mercury in cases of Rheumatism very highly Dr Barton was not partial to it in in common cases, but recommends it in Syphilitic Rheumatism, In the Phila Almshouse & Penn. Hospital I have had it completely in my power to try its effects in this disease & have never seen it fail after the patient was salivated, by the common antimonial powder or Calomel combined with Opium. In Gout it is not entitled to any great praise. Dr Hamilton has however employed it with great success in inflammatory Gout. In Hepatitis it has been employed, after the proper use of V section purging blistering &c it may be used as a sialagogue. it is generally unfit when the organization of the liver is not destroyed. I would suppose the Mercury the best & only remedy in this disease. In some cases the liver is enlarged. In some it is enlarged & indurated In some it is greatly diminished in size. in some cases the liver is tuberculated, & in some it has been destroyed by suppuration, in all these cases except the last, it is useful. but in the last mentioned, it is useless. Blisters on the parts most painful are a good application. I dont know that it is necessary to dress the Blister with mercurial

Ointment as has been recommended, but to dress it with some stimulating ointment, as unguentum, Sabina &c. In the E. Indies they suppose that if they produce a salivation the disease is cured. A gentleman of this city who lived a long time in the Indies says he was salivated 3 times for a disease of his liver which proved successful every time. he is now in health. When hepatic affections extend to the lungs, no remedy is so good. In Scurvy it is a very useful remedy. such is the character of Mercury, that Physicians resort to it without any hesitation. In Dysentery I consider it among the first remedies. this disease is a form of bilious fever with the inflamation situated in the intestines. Lind, Clark & other practitioners of the Indies, all agree in saying it is an excellent remedy. as much praise is due to mercury in this disease, as it was in the yellow fever. Dr Barton used to say that if mercury didnot do good in 3 or 4 days its use ought to be laid aside. this is certainly not a good practice to lay it aside when it was 1st beginning to do good. In Scurvy attended with Hypentery it ought not to be given. In Colica Pictonum Dr Clutterbuck recommends it in small doses, but Dr Lind recommends it in large doses so as to produce purging. In Nephrosis. Calomel is a valuable remedy. In Epilepsy I have used it with success. it has

frequently suspended the disease for a long time — there are some cases however in which no remedy will prove effectual in this disease, as for instance I sometime ago dissected a patient, where there was a hydatid on the bones of the brain. In Tetanus it has been used with success. but its action is too slow for a disease so active as tetanus. In the W Indies it is used in wounds to prevent Tetanus in our country it is unnecessary. In hydrophobia it has been used with no success. The disease has occurred when under the influence of mercury. I believe it will not act as a prophylactic. The Knife is the only remedy. It is true the disease has occurred when the Knife has been used but in these cases the operation was performed too late. Cut out the part late or early, what is the operation compared with the Rabid idea of hydrophobia. In Dysentery it is useful & has been frequently used with success. It is a curious notion Physicians have taken, they have tried all other things, in vain they resort to mercury, by its action as a Sialagogue & a very good notion it is in this disease. In hydrocephalus it is as I said in a former lecture, an excellent remedy. I believe it to be a collection of water in the brain, resulting from inflamation, quite different from that produced from a blow on the head. this disease may kill the patient, or the water in the brain may kill by pressure or a secondary inflamation may take place, from the reaction, excited by the irritation

of water on the brain. In this disease you must bleed largely, purge freely, blister severely &c. If these remedies fail by being administered too early or too late you must then have recourse to the mercury, in these latter cases it is to be used as a remedy to promote absorption & a ptyalism. In the Exanthemata it is particularly applicable. Citrine Ointment is a good preparation exter-nally. Salivation cures many of these diseases which would take up too much time in enumerating. In some cases of deafness it has been used with success, but as this disease is so obscure it is impossible to know how or when to use it. The eye is an organ no less obscure than the ear. Mercury in these cases is good – I told you in removing recent opacities of the cornea, it is useful & have frequently succeed. In Gutta Serena it has too been used, but has more often failed than cured. I will conclude the history of Mercury with an account of its use in Syphilis, which I will consider at my next lecture.

Lecture 41

In Syphilis. I ought to dwell on its use for some time, as it is of great importance to young Physicians. This disease affects persons in different situations in life very differently. Talepius tells us the Jews & Mahometans always escape. Persons who have once had a chancre are more

liable to them again. Chancres do not occur so frequently as Gonorrhoea. Mr Hunter says 5 cases of Gonorrhoea occur for 1 of chancre. This proportion is not correct. There are not 5 to 1. If Hospital practice was a test, I am sure you would suppose more cases of chancre occur than Gonorrhoea. However Mr Hunter has gone so far as to say that 5 cases of Gonorrhoea to 1 of chancre takes place. No person will consult a physician for a common Gonorrhoea. Therefore many cases get well spontaneously. The Frenum penis is 1st affected. The glands penis next. The Vagina is the seat of chancre in women. In the Frenum the matter acts early. The Frenum ulcerates first. The glans next. The prepuce next the skin of the penis & outside last. It is sometimes 4, 5, 6 or 7 weeks before the matter acts. Mr Hunter relates a case of a man who travelled 100 miles & passed on 7 months before symptoms made their appearance. Some time excoriation takes place & ulceration follows. Sometimes ulceration is preceded by a pimple. When the angle of the frenum is acted on only by the matter, a hole is the consequence. When a chancre takes place on the skin it assumes a scabby appearance. Sometimes inflamation takes place & phymosis or paraphymosis are the consequences when the inflamation is spreading. The chancre does not lose its appearance. The matter varies very much in its appearance, it is yellow sometimes green & sometimes bloody. Sloughy sometimes

form in the venereal chancre Gangrene sometimes takes place it is 1 of the eliminations of common inflamation. Chancres in most cases do not spread rapidly, however large parts of the Penis have been destroyed, by chancres ulcerating as to the cure of chancres one of the most important indications is to prevent the contamination of the system, & this is to be done by mercury. Extirpation by the knife has succeeded by reducing the ulcer to a simple wound. Caustic has been employed, with the same effect, however the best practice is to avail ourselves of local & general applications venesection & purging with calomel &c. has sometimes cured the chancre, the objection to trusting to local applications is wholly that before they act, the system is contaminated, sometimes the caustic is better than the knife, as the caustic destroys the morbid parts & no more, however more bad boes occur after the treatment of caustic than with red precipitate. the cause I cannot give you but so it is. Dr Physick has always remarked this - the remedies for the cure of chancres are mercurial. for this purpose a variety of ointments have been prepared & used the Ointment hower should be varied, if 1 does not succeed you must try another the Red precipitate or calomel mixed with simple cerate is an excellent application

or it is more proper to sprinkle the part with a little of the dry powder, & cover the whole with a cerate powder (plaster) we said if possible. Phymosis is often in our way we are if possible to prevent it by venesection purging &c. Rest ought to be advised & attended, we said use injecting in those cases. sometimes a solution of corrosive sublimate in water. Sometimes Calomel in a solution of G. Arabic is used & sometimes Opium is added to the preparations. If any of these preparations increase the inflammation you must lay them aside. when the prepuce is greatly swelled Cold water &c is an excellent application. If Leeches can be procured they ought to be used however in some cases you cannot get the injection under the prepuce, under such circumstances you must divide the prepuce with a knife this may be done with a Physicks knife or fistula in ano. If the tension under the prepuce is so great that you cannot introduce a knife In these cases you must dissect through & lay it open in this way. In those cases where the patient will not submit to this operation ulceration will take place which might have easily been prevented by the surgeon. In some cases I have seen the prepuce adhere to the glans penis. I of the most difficult operations I ever performed was where this had taken place. ——

In Paraphymosis, I have seen the glans penis ~~[illegible]~~ ~~[illegible]~~ slough off by the stricture occasioned by the prepuce being so great. this ought by all means in our power be prevented. we should give mercury internally. we may begin by giving 1 or 2 grains internally every few hours. many other ways of mercury have been so used, but I prefer this in preference to all others. the Mercurial Ointment may be used & the best way of doing it is to direct the patient to rub 1 or 2 drachms in his thighs every evening. we should also continue the mercury after the symptoms have subsided. the effect of mercury in curing this disease is to produce a fifty alism. which is to be carefully attended to when you perceive symptoms of salivation coming on you must lay the calomel aside, & just before the mouth is well commence with the mercury again, which is to be regulated in this manner until all the symptoms have subsided by these means you find the patient to no inconvenience he may attend to his ordinary business ~~[illegible]~~

Lecture 42

Bubo a swelling in the groin attended with pain ~~[illegible]~~ arising from venereal poison. this complain is always to be attended at the same time that Mercury is to be used externally & internally Mercurial Ointment is to be rubbed over the groin

On the inside of the thighs. Blisters to be applied over the buboes, in order to discuss, poultices are to be used also. When the bubo is to be opened it may be done either by the knife or by caustic. The common Lapis septicus, may be rubbed over the parts until they become black, afterwards an Opium poultice should be applied. The nitric precipitate is a very good stimulant for indolent ulcer. Iron bubo Mercury is to be used internally during the whole of the local remedies. Sea bathing has been recommended when scrophulous taint is suspected the cicuta is to be used largely. ℞. Cicuta ℥ij gs. Corr. Sublim. mercury ℥ss made into ℥ij pills, 1 every 3 times a day. **Symptoms.** The secondary symptoms of Syphilis, or Lues Venerea, are, blotches on the skin ulcers of the throat &c. nodes are among the secondary symptoms of Lues venerea. Lues Venerea, shews itself about 6 weeks after the use of mercury for the cure of chancre. The sore throat occurs for the most part before the blotches of the skin they occupy the tonsils & soft palate, they are generally preceded by fever & pain in the head the blotches do not confine themselves to any part, but generally affect the forehead. for the cure, calomel, the Blue pill, nitric acid.

℞. nitric acid ℥ij
Mucil G. Arabic ℥ij
Aqua. ℥vj } Dose a tablespoonfull several times a day

When Lapis septicus is applied to ulcers in the throat, it is to be applied with a hair pencil after which it is immediately to be wet with a rag wrapped round a stick dipped into vinegar they will neutralize the caustic & prevent its spreading. The Mercury is to be used a week or 2 after the blotches have disappeared. Nodes &c are cured by a long continued action of mercury, friction to prevent the mercury from injuring the tone of the stomach. In common cases the nodes swell ulcerate & a scale of bone is thrown off and the parts heal blisters & incisions are to be made. Salivation & the other effects of mercury are more durable, than effects from any other medicine. Sometimes 1 gr calom will produce salivation. The salivation is sometimes extremely profuse. The tongue swelling sometimes is protruded without the mouth. Inflamation of the salivary glands, sometimes Gangrene occurs & the cheeks slough off. exhibits a horrible appearance. To stop salivation, sulphur has been used Opium also. Exposure to dry cold air has been found most successful. Mercury is indispensably necessary in diseases which have run on for a great length of time. Notwithstanding the use of remedies in order to produce a new impression. In yellow fever it is also recommended.

Lecture 43. I never saw but 2 cases of hydrargirian & Mr Wilson who has used mercury very freely has not seen it these 7 years. I refer you to Pugson & others on this subject. But it is a fashionable opinion that they are frequent & I have examine Mr Mathias. He states that mercury has a specific poisonous effect &c. He states that it is most analagous to venereal. I lament the appearance of this book as it was & has lessened the confidence of some in the remedy consequent to this doctrine, it is said venereal is a very rare disease. I shall compare the evidence before you & you may judge for yourselves. I have told you the real morbid effects of mercury, one would immagine nothing easier than to settle this question by experimenting mercury stimulates & in some cases produces morbid symptoms, has not one of the symptoms of venereal, will it produce a chancre, or bubo. No, one excites venereal powerfully & a peculiar ulcer. Others in sore throat, I have kept a patient with epilepsy under the continual effects of mercury, & in hepatitis for years & no chancre no bubo & not 1 symptom of venereal. I know an old gentleman who has been 40 years under the use, has not 1 symptom described by Mr Mathias. In India where mercury has been used very freely for hepatitis

We have no instance of this disease except lately very late. Let us see if mercury will excite a bubo. There never was a case that bubo produced this is never the case unless the venereal action previously existed. There is no such a thing as this except such as has been described by Hunter Bell & others, the former says it is curable by exciting another disease & in some cases the mercurial fever interferes with the healing of the bubo & any other causes interfere with the healing process but the mercurial fever is a most frequent one, & Hunter & Pearson say we must wait 8 or 10 days, until the fever subsides, & then go on with mercury. & they both state it is difficult to excite the venereal disease. The same remarks are applicable to sore throat. now if the sore throat were mercurial we should have no occasion to resort a 2nd time to mercury but instead of this mercury will cure, instead of being the cause. All I shall add is that, when in these cases, mercury disagrees with the constitution suspend it, again resort to the remedy. Whatever destroys our confidence in this remedy ought to be opposed. A few words respecting the venereal disease being rare. It is a point to be considered, as that ulcers sometimes from on the tails & if they occur after suspicious connection we are liable to mistake them for venereal. If there is any doubt on this point, mercury will cure them promptly. & the only difficulty is your Patient is liable to a sore mouth for 2 or 3 days. on the other hand a contrary mistake would be dangerous.

of little vesicle around the corona glandis 10-12 containing thick pus & is cured by puncturing & washing with lead water a few days and when the skin begins to skin over, with brandy. I am bold to tell you that when you meet with 1 case of this kind you will have 20 of the venereal. I have frequently been called to cure secondary symptoms, after treatment without mercury. I earnestly recommend Hunter's work. I am by no means convinced that the saline preparations of mercury are more apt to excite mercurial fever than blue pill. Calomel is my favourite next blue pill, & in chronic cases corrosive sublimate with cicuta or Opium. A Physician at Vienna has cured 4000 cases of venereal by corrosive sublimate without salivation. Mr Abbington of London cures Gonorrhoea in 48 hours by corrosive sublimate 3. grs/2 gr. at night &c. In using mercurial ointment the patient is to rub it over his thighs &c. During the use of mercury the patient should be confined from the air as it interferes with its use. Chancre, when calomel effects the bowels, use the blue pill, Plenk's solution for sore throat. Mercurial fumigations have lately been revived by Mr Abernethy, this plan used on the continent of Europe, was found to fail. Mr Abernethy has cured venereal sore throat in 60 hours. Mr Pearson is less favourable to this form, but when the body is covered by venereal ulcers he recommends it

But fear it will not be sufficient, to secure the constitution against a relapse. I agree with him, & we have stated, the rubbing of calomel above the bones to be the best remedy (application) externally. When using mercury in the venereal disease & symptoms become stationary, we are to ascertain if it is from cold, dyspepsia or chronical disease. In the latter case suspend it & if necessary give tonics.

Lecture 44.

I have concluded the history of Sialagogues, & shall not conceal from you any of its bad consequences you must be on your guard against certain constitutions. I come next to treat of a class of medicines called Emmenagogues. they are those substances capable of promoting the menstrual discharge. It is doubtful whether there is any particular determination towards these respects It is sufficiently certain that there are many substances, which when received into the stomach have their stimulant operation more particularly determined to one part than to another. the Kidneys for example the bladder & other organs It seems probable a priori, that there may be substances disposed to act more particularly on the Uterus. yet experience does not confirm this supposition

there being perhaps no proof of any of the substances
styled emmenagogues, producing their effect from
any specific power. & many articles have a tendency
to act on the uterine system. and there is
not one old woman, but what knows some em=
=menagogues. the catamenia is not a flow of blood
but a fluid sui generis secreted by the uterus. Dr
Rush says never lose sight of Nutrition, in childhood
& neck of the catamenia in women. By Ne=
=trition of the menses (Chlorosis) is meant when
the menses do not flow at the usual time (14 to 16
in this country) & is the cause of very disagreeable
symptoms which I shall communicate viz hea=
viness, listlessness to motion & fatigue on the very
exercise. palpitation of the heart, pains in the
back loins & hips. flatulency & acidity in the sto=
=mach & bowels & many symptoms of dyspepsia
the appetite is singularly depraved. lime chalk
& other absorbents are greedily eaten when the
accustomed food is rejected. as the disease ad=
vances the lips lose their colour. the eyes are
encircled with a livid areola. the face beams
pale assumes a yellowish hue, & the whole bo=
=dy has a Phlegmatic (Leucophlegmatic) ap=
=pearance, with every indication of small opposi=
=tion & energy in the constitution. the feet are af=
=fected with oedematous swellings. the breathing
is hurried by the slightest exertion, the pulse is gene=

but small the patient is affected with various symptoms of hysteria, cough & sometimes confirmed hectic fever. some suppose the cause of chlorosis to be debility or laxity of the constitution in general, & of the uterine system. Dr Cullen considers the cause the cause. Dr Hamilton ascribes it to a depraved state of the alimentary canal, because costiveness precedes the disease. Dissections are in Dr Cullen's favour. But Dr Hamilton's is the best mode of treatment. As well might Dr Hamilton say that a scrophulous knee joint had its seat in the stomach. Purging is useful in this disease where the appetite is vitiated &c.

Here purging & aftermath tonics are useful with exercise, delightful pursuits. Dr Rush in some cases used venesection, but this is seldom necessary. The warm & cold baths, stimulants, Blisters &c are often useful. Cleotimary has also cured it.

If it arises from acidity, alkalies magnesia chalk &c are to be used. When the catamenia (or menses) have appeared & are interrupted it is called a suppression. The suppression of this discharge is supposed to arise from debility of the uterine vessels or deficiency of action in them. But the most frequent cause of suppression is cold. It is also a symptom of other diseases, either acute or chronic. ——

1st If it arises from Catarrh remove it & the suppressor will be removed. It is often a symptom in Phthisis. In Leucorrhoea it is sometimes a most obstinate symptom. As True says we need not hope for a cure at the end of 7 years. Articulars Emmenagogues. Aloes. This cathartic it has been always remarked is supposed to operate more peculiarly on the large intestines. & its stimulant operation it has been imagined is thence propagated to the uterus, hence its celebrity as an emmenagogue. Though what efficacy it has probably depends principally if not entirely on its cathartic power. As it is known to have that a stimulant effect however produced in neighbouring parts seems to be in some degree propagated to the uterine vessels, & hence several medicines exert in emmenagogue power, greater than can be ascribed to any general action they exert on the system. It is thus that some substances belonging to the class of cathartics have been supposed to act, their stimulus being communicated from the large intestines to the uterus. This is the case with the present article (aloes) under our present notice. it stimulates principally the rectum from thence communicated to the uterine vessels. It is given under the form of pill twice thrice & frequently in combination with other remedies as with Iron Rhubarb &c &c &c

Dr Galager says that pills of aloes are very over full in amenorrhoea, he combines it with carbonate of Iron this is the formula of Hooper's Pills. —

℞ Sal Martis. Sulphate of Iron — ℥ss.
Jalap ℥i
Cinnamon ℥ss
Madwort Pills as large as a pea } 3 or 4 taken at Bedtime

Hydrargyrum. Quicksilver. The preparations of this metal are occasionally employed in Amenorrhoea. Calomel is the preparation generally used more frequently however in combination with other emmenagogues, to promote their action than alone. Dr Barton's favourite remedy was in salivation. It is given as an alterative. Helleborus Niger. Black hellebore. this is a powerful cathartic. It was highly recommended by mead as an emmenagogue under the form of tincture ℥i of this being given at bed time. This was given by melampus to King Cretin's daughter, hence the tincture name is made in the following manner

℞ Black hellebore ℥iv.
Cochineal — ℥ss.
Dilute alcohol ℔ ijss. } Digest 7 days then strain Dose as above mentioned —

Drs Barton & Chapman speak highly of it. I have myself employed it beneficially. I gave 30 gutta every day. given some time before the expected catamenia. Dr Physick found it to purge in large doses

Friction to the lower extremities in this way it is a most valuable medicine. Some stimulants are employed as emmenagogues. GUAIACUM. This is given in the form of volatile tincture. A very elegant & efficacious tincture is made in this manner ℞ Gum. Guiac. ℥IV Ammoniate Alcohol ℔ ij } Digest 7 days then filter through paper. Dr Dewees who has great experience & who was a teacher of midwifery, highly extolled it. I have used it without any advantage. Polygala Seneka. This is generally employed as an emmenagogue, it is given in powder & decoction ℞ Pol. Seneka ℥ i Boil it until ⅓ escapes. it may be combined with cinnamon or orange peel. The dose is ℥j Dr Chapman gives ℥ij every hour it is infused. Secale Cornutum. Ergot of Spurred Rye. The Professor of Midwifery has already informed you of the emmenagogue virtue of this plant, under our consideration. Mr Erkstine made a number of experiments on animals with Ergot. In several it caused abortion. I employed this 3 times in 1 case & was completely successful, but in the other 2 cases I did not derive much advantage. Dose 15 grains every evening at bed time. Sabina. Savin. A stimulant the operation of which has been supposed to be powerfully directed to the uterine system. So much so that prostitutes (it is said) use it for preventing abortion to hide their shame.

Dr Barton mentions a case in which it procured abortion. The leaves are used. It resembles Sereka in its promoting the secretions. Never give it when there are febrile symptoms. Dr Barton used it in Rheumatism with advantage of which he will inform you. Externally the powder of the dried leaves is used as an escharotic & mixed with Lard as a stimulant to excite suppuration from inflamed parts or surfaces. Many more might be enumerated as Opium Asafoetida &c. but it is useless to load your memory with them. Fer. Ferrum. Iron. The powers of Iron as a tonic may be supposed capable of being exerted on the sanguiferous system & of removing suppression of the discharge, arising from deficient action, more especially when this is connected with a state of general languor & debility. In such cases accordingly it is employed frequently as an emmenagogue. Dose of carbonate of Iron from 5 to 10 grs. daily. also given in the following formula

℞ Rubigo Ferri 5 or 10 gr } Given once or
Aloes 5 or 10 grs } twice a day

Anthelmintics.

The term anthelmintic is derived from the Greek. Anthelmintics are medicines adapted to expel worms from the Alimentary canal. This class I shall greatly abridge the worms which are found in the human subject

May be reduced to 3 general classes viz the Lumbricoides, teres, & oxyuris vermicularis.
Ascaris Lumbricoides. or round worm, is much more commonly found in the intestines of children than in persons full grown or advanced in life. it is very usually met with in the first two very rarely in the 2 last. taken full grown the Lumbricoides is about 12 inches long when pt discharged they are of a semitransparent colour & so in become brown. they are generally found in the jejunum. The Lumbricoides. is known to differ from the common earth worm. but practitioners in this country have made little enquiry into the circumstances upon which this difference depends. the 2 species of worms if attentively examined, will be found to differ a good deal from each other in their external appearance. The lombricoides is more pointed at both extremities than the common earth worm. The mouth of the lumbricoides consists of 3 rounded projections with an intermediate cavity. the mouth of the earth worm consists of a small longitudinal aperture situated under the smaller surface of a small rounded head upon the under surface too of this worm, there is a large semilunar fold of the skin into which the head retreats, or out of which it is elongated. which is entirely wanting in the lumbricoides. the anus of the lumbricoides opens on the under surface of the worm a little way from its posterior surface extremity.

by a transverse curved fissure the anus of the earth-
worm opens by an oval aperture at the very ex-
tremity of the worm the outer covering of the or lumbri-
coides is less fleshy & strongly marked by transverse
rugae than in the earth worm. In the latter
there is often to be seen a broad yellowish band
surrounding the body of the worm, but in the lum-
bricoides this is entirely wanting. on each side of
the lumbricoides there is a long itudinal line
very well marked in the earth worm there are
3 longitudinal lines on the upper ½ of its sur-
face but these are so faintly marked as to be
hardly observable. The lumbricoides has nothing
corresponding to feet, whereas the earth worm has
on its under surface but more strongly marked
towards it posterior extremity, a quadruple
row of processes on each side, very sensible
both to the eye & fingers. which manifestly
serve the purposes of feet in the locomotion of the
animal. The internal structure of these 2 spec-
ies of worms is also extremely different. In the
lumbricoides there is an intestinal canal nearly
uniform & smooth in its appearance which passes
from 1 extremity of the worm to the other. near
the head of this worm the canal is narrower
than it is any where else & somewhat distinct
in its limits, this may be considered as the
oesophagus. In the earth worm there is a large

and complex stomach, consisting of 2 cavities. & the intestinal canal in the latter is likewise larger & more formed into sacculi than the former. The parts subservient to generation in these 2 species of worms, differ very much from each other. in the lumbricoides there is a distinction of sex the parts of generation being different in the male & female. in the common earth worm the organs of generation are the same in each individual as this worm is hermaphrodite. The appearance of the organs of generation is extremely different at first sight in the 7 species of animal from the other. there is an oval mass situated at the anterior extremity of the earth worm resembling a good deal the medullary matter of the brain. In the lumbricus teres this substance is wanting. these are the principal differences between one species of animal & the other which are obvious, upon a very moderate attention to each other. many other differences would doubtless be found by a person who might, choose to prosecute their anatomy, distinctly. the length of the lumbricoides is generally 5 or 6 inches in length, & the thickness of a goose quill. Ascaris. the ascaris is a very small worm which is often found at the lower end of the rectum in children & over more frequently in adults. than is commonly imagined.

It is of a white colour & above 1/2 an inch in length at its extremity where its head is placed it is a little narrowed & at the other extremity it terminates in a long very fine transparent process. These worms as before mentioned are found in the Colon & rectum in children occasionally found in the vagina & uterus cause a violent pruritus, also in the Kidneys Bladder &c. on exposure to air by voiding the excrements they immediately hide themselves in the fæces.
3rd Tenia. Ape worm. of these sometimes only 1 is found. but sometimes a number of them are found. Dr Barton has seen 18 discharged in succession. they are composed of flat joints terminating in a round tail, each of which joint is a distinct animal. There are 2 species the 1st have mouths around the margin. It is endemic in some parts of Europe of the 1st species the joints separate & form the Cucurbitina after which they do not appear to retain their position any length of time but are rejected shortly after this separation takes place They are sometimes very long. some even 36 cts &c. If the head is expelled the worm is soon regenerated. they occupy the small intestines. but sometimes get into the stomach. this worm has been found in the dead poetry, which has excited the minds of the Physiologists, a variety of opinions have been advanced on this subject. It is supposed they occur most frequently between the age of 5

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to 10 years. I refer you to Mr Thorpe of London for an account of this subject. Gentlemen I consider this class of medicines of great importance. The vulgar ascribe too much to worms, yet I must say Physicians ascribe too little to their effect. The greater part of our nervous diseases are caused by them, it is not stated that any particular constitution are more liable to them, however they are found to affect weakly children more than robust ones.

Symptoms.

Swelled abdomen. Offensive breath, swelled upper lip, alae & columna nasi pruritus of the nose. pale urine. pulse various. Lax or costive state of the intestines. bad or ravenous appetite mucous stools starting in the sleep & languor. In the advanced stages the mucous stools are encreased subsultus delirium & death. the late Professor use to remark. they were attended with so many symptoms that it was often difficult whether to ascribe some diseases to the influence of worms or to other diseases (or causes) Febris Verminosi. Worm Fever. Some of the most eminent authors ascribe some epidemic fever to worms. Dr Rush acknowledges their presence in fever but thinks they may be an effect of the disease not its cause that is the same cause that produces the disease as also a tendency to the production of intestinal worms. he further adds worms increase the danger of fevers

I agree with him in part, but I believe they are the remote cause of fever, Persons of weak nervous habits, this fever is a kind of intermittent. Dorsey has never been able to distinguish it. Dr Hooper has 200 evacuated. the patient suffers greatly by the existence of worms. a surgical case will suffice to show that worms are sometimes the cause of disease. Peritoneal inflamation has been caused. a gun shot wound through the abdomen, which wounded the intestines in which a number of worms were discharged into the abdomen & they caused Peritoneal inflamation, as before mentioned they produce diseases of the class neuroses. Epilepsy. In the management of this disease we should always enquire respecting worms, as it is often cured by anthelmintics when all the usual resources have failed. Dr Welsch of relates a case which I shall read to you. Of a black boy. Symptoms. There was palsy of the optic nerve his eyes dilated by strabismus. he answered incorrectly I placed a dollar and lighted candle before him & he could see any object. I administered drastic cathartics without effect I then resorted to an emetic & during its operation a large worm was evacuated & the sooner as the worm expelled then the negroe got better I read this case to show how important the stomach is of producing diseases. Corea St. Viti. this is another disease caused by worms

Hypochondriasis. This is very frequently caused by worms. Dr Wistar has had a case of this kind Hydrocephalus Internus. In this we should always attend to worms for it is difficult to determine whether it proceeds from some other cause or from the irritation of worms. That it may be caused by worms cannot be doubted when we reflect that Mania is often produced by them. I have seen strabismus & all the symptoms of Hydrocephalus Internus by worms. Principal Anthelmintics. Doctor Hamilton says the utility of such anthelmintics, as have been found to be most beneficial has in my opinion been in proportion to the purgative power they possess. after a course of anthelmintics. which are not direct ly cathartic, it is usual to give a free dose of a purgative which is then repeated 2 or 3 times. & to this a considerable share of the effect when worms are evacuated is properly to be ascribed. Calomel with jalap Gamboge. or Scamming is the cathartic usually employed & metimes have occasionally evacuated them by the mouth. when in the stomach. The case welsh relates was cured by emetics as before mentioned. as soon as the worms are dead they cease to be irritable. Anthelmintics have been supposed to produce this effect (expelling worms) various modes of operation some of which are in coarse rough particles as Iron & tin-filings. or consist of sharp spicula.

as the down of the dolichos pruriens or supposed by the mechanical operation of these to dislodge from the mucous of the intestines the worms which are evacuated. Other substances ranked as anthelmintics seem to have no other property than bitterness. By this gravity they have been supposed to prove noxious to these animals. it has also been imagined that these so far as they prove useful, do so by restoring the tone of the digestive organs. The production of worms being supposed to proceed from debility of these organs, in consequence of which either the food is not properly assimilated or the secreted fluids poured into the intestines are not properly prepared. Calomel several of the preparations of mercury have been employed as anthelmintics. Calomel is entitled to the preference, not only from its direct action as a mercurial but also on account of its action on the intestinal canal. It is given by itself in a dose of 10 or 12 grains to an adult. in smaller quantity when combined with Rhubarb or jalap. Dose to a child 6 gr at Bed time. It is also generally the basis of the cathartic usually administered after other anthelmintics have been continued for some time the following is the fashionable

London Anthelmintic ℞ Calomel gr iij
sulphate of Iron gr 1 mf pulv. to be repeated
for 3 nights successively. & then an active
purge of calomel & jalap Rhubarb &c to
carry off

Lecture 45

Chenopodium Anthelminticum. worm seed
Jerusalem oak. this plant grows plentifully
in the U.S. & is much used for worms. the
whole plant has a powerful smell of which it
is very retentive. Its taste is bitter with much
aromatic acrimony. The whole plant is em-
ployed the leaves & seed may both be employed
but the latter are generally preferred & I believe
the most powerful. To young children you
may give it in the form of tea, give it for
3 mornings successively. then omit 3 days
& give a cathartic during the interval & if
necessary repeat it again. the dose of the oil
is 5 gts to a child under 2 years of age.
after giving 3 doses a purge of calomel is to
be given. it is to be repeated again if nec-
sary to a child of 5 years of age you may give

from 10 to 15 gutts because I think they act more on the worms themselves than on the stomach & intestines. I have long used this medicine with the most decided efficacy. Dose of the powder a tablespoonfue to a child. it is always given in expressed juice. Spigelia Marilandica Indian Pink. Carolina Pink Root. a native of S. America. the root & stalks of this plant are used in medicine, on the supposition of their anthelmintic power. they have a bitter taste, In a large dose prove purgative & also some times narcotic Every part is anthelmintic but the root most so. Dose 5 to 10 gr to a child & from 20 to 30 to an adult. The infusion is made by taking ℥i of the plant & water ℔ dose, 1 table spoonfue 2. 3 or 4 times a day to children & to adults a wine glass fuller In made the following experiments, with the lumbricoides in Decoction of the leaves they were kept alive 24 hours. In a decoction of the stems 3½ hours in a decoction of the root but 25 minutes In some instances some very alarming symptoms have occurred from its use particularly nervous affections. Some Physicians suppose these symptoms to arise from the ill qualities of a root growing along with the spigelia & not being separated from it

I do not however undertake to say any thing of its pernicious qualities but I think it might be placed among the narcotics. Mr. Humboldt's experiments have shown, that it produces in a great degree all the symptoms of Opium. (His experiments) In large doses he found it to affect the pulse. He took ℥i in 3 minutes his pulse rose from 76 to 78. then to 80 & was reduced afterwards to 46. By purging proper attention is to be given. Dr Duncan observes he has known ℥ss. of Spigelia produce as much purging as (Spigelia) as Rhubarb. Dr Home of Edinburgh opposes the idea that it possesses any narcotic power, in fact I feel myself at a loss to determine. but I believe it ought to be combined with cathartic medicines. I think senna a very good cathartic. for that purpose Dr Galagher of this city, has always combined it with senna & with the most decided efficacy. It seems the Practitioners of this City have took up the practice & use it in this manner. I have mentioned a number, but as I told you before I intended to abridge the list very much. I shall omit mentioning many but will go on to mention **Melia Azadarach**. Pride of China. Poisonberry tree. China tree. The bark of this Asiatic tree now naturalized in the Southern parts of the U. S. is a powerful anthelmintic Dr Barton has often employed it & he believes it is the most useful

articles of the class. It is given in decoction & infusion. The bark of the root is more powerful than that of the stem or branches, though more especially adapted to the destruction & removal of the common round worm (lumbricoides) It also exerts its power over taenia. Its action is similar to the spigelia, in certain cases so an inefficient, & like the spigelia should be used with prudence in the management of young & delicate constitutions. I might mention many more but I think it useless to have too many in a class, where from few you can obtain an anthelmintic power, but I shall mention two as candidates for this class. Helleborus Foetidus. & Cabbage tree bark (Geoffraea Inermis) Of the first the leaves are the part used. of the latter the bark. This has an unpleasant smell with a sweetish taste. It has been considered as of considerable power especially in expelling the lumbricoides. It is usually given under the form of decoction ℥i being boiled in ℔ ℔ss of water to ℔ ℔ss and from to 2 ounces of this being given as a dose to an adult. It usually operates as a cathartic & in an over dose is liable to produce sickness & vomiting, the same symptoms are said to be induced by the incautious drinking of cold water during its operation. when they occur from either cause they are relieved by a dose of Ol Ricini

Ferrum. Iron. I shall mention some of the prepa-
rations of Iron as I am induced to do from its
high recommendations. The following is a good one
℞ Rubigo ferri ℥ij }
Sal martis — ʒj } divid into 12 Powders 1 of
which is to be taken every morning. for a child
you may give ½ a powder. Dr Gallaghur Ruhr
& others agree that it is one of the best remedies
as an anthelmintic. Muriate of Soda. (Common
salt) this is an ancient Remedy & very known
to Celsus. a tea spoon full every morning to
a child of 2 years old. 3 times a day. Doct
Rush disguised it in cochinae. Dr Ruhr in
molasses. but this last is not a very good ve-
=hicle. The preceding remarks are adapted to
lumbricoids. Stannum. Tin. Tin is reduced to
a powder consisting of small rounded par-
ticles by heating it nearly to its melting point
& agitating it briskly, either this powder or
what has been recommended in preference, the
metal in filings is used as an anthelmintic
in a dose of ʒ ℥ss or ℥ij or in larger quantity
It is repeatedly taken in the morning & a cathar-
tic is afterwards administered. Its effect has
been supposed to be mechanical, so far as
it operates in dislodging the worms from the
mucus of the intestines by the pointedness of its
particles.

Ascarides. Dr Heberden these are the least troublesome. however it has been remarked that all the symptoms have resulted from these or from the former. the symptoms swelling & itching of the rectum, griping, tenesmus, disturbed sleep I have known a gentleman to be frequently annoyed with them, & a troublesome itching always about the anus always occurred. These worms sometimes cause mania, Epilepsy. & he treatment the same as for the former when tenesmus attends a glyster of warm milk & oil will be proper. Dr Heberden has found this composition very beneficial. Hiera Picra is often found useful this is made in this manner

" Take of Socotrine aloes — 1 Pound
White canella — three ounces } Powder them

Separately, then mix them ℥i of this Powder to a pint of brandy. Expressed Oils evacuate the worms from the intestinal canal, but do not kill them. when tenesmus attends use glysters Nicotiana Tabacum. It is a well established fact that Tobacco shews its anthelmintic effect, even when it is externally applied to the body. Camphor. as it is so destructive to other animals, has been used to destroy worms and it is general by injected in the form of camphor tea which is made by taking ℥i of Camphor, Pour a sufficient quantity of alcohol on this to dissolve it

then pour boiling water over it, this is given in the form of injection & has brought great numbers of ascarides away. a solution in milk often discharges ascarides. For the removal of this species of worms whose principle residence is in the rectum, for which it sometimes however emigrates into the vagina, occasioning the most insufferable pruritus, enemata of camphor have been found among the most powerful remedies which have yet been employed. Bitters may also be employed in the form of enemata with good effect. Various medicines, Rue, Tansy & other bitter herbs have been recommended as also nostrums as also various Mercurial preparations. Oleum Terebinthina. This in my opinion is a very good anthelmintic. It ought to be taken in the morning on an empty stomach, a wine glass full to be taken during the day. in large doses it purges & by that means prevent any tenderness by of its passing off by the urinary organs the practice would seem to be rash, but by practice will decide to the contrary. by its use it brought away

(He probably exaggerates) It is also found useful in Lumbricoides. Arsenic. Dr Fisher of Massachusetts, who informs us that he has

frequently used this as a powerful anthelmintic many more might be mentioned, but I am sure with those mentioned already you will be able to cure your Patient. Colica. a gnawing sensation of the stomach is a more constant attendant, than on any other species of worm. the Mercurial preparations are useful. Calomel has been taken in large doses. the common sublimate is much better. Dr Rush recommended the Rubigo Ferri to be repeated as often as necessary in proper doses. Dr Harty heme found it very successful in one case & thinks it an innocent medicine. Iron Filings. has been very highly recommended. dose 1 Tea Spoonful to a child of 5 years of age. Tin Filings. a teaspoonful of this is also very useful in tape worm. drastic purgatives ought to follow it's use. Dr Fisher of Massachusetts used it with great success. his form of preparing it was an amalgam of tin. 5 pts melted tin 2 of Mercury dose 15 to 20 grs 2 a day. if the bowels are not open Calomel must be given. a case occurred in N. York. where 45 ft. of Tinea was evacuated by the filings of tin, as it was the principal ingredient in the preparation. The vegetable anthelmintics adapted to this species of worms, are very few. Dolichos Pruriens Cowhage E. & W. Indies, the down which covers

The outer surface of the pod of this plant consist of very sharp spicula, and is the part used as an anthelmintic. It has been much used in the W. Indies, more indeed than in any other part of Europe. Dose a teaspoonful for an adult and one half the quantity for a child, given in syrup or Molasses repeated 2 or 3 times, a strong cathartic being afterwards exhibited. Its action is entirely mechanical. I have no experience in its use. I have seen few cases which I cured without it. The Terebinthina has been very highly recommended, & I believe is a good remedy, particularly for Tinea. I had a case of Tinea, when the Person said he cured 27 yrs of worm. From the use of Terebinthina. Erratum. (Terebinthina Arsenic placed under the head ascarides, ought to be placed under Tinea, a mistake in writing.)

Lecture 40

Of Epispastics. I shall make this term include three different degrees of epispastic. 1 Rubefacient. 2 Vesicatory & 3 Caustics. as they only excite locally, I do not hesitate in placing them at the bottom of our list, as they possess a stimulating property, they form a kind of connecting link, between

The evacuantia & stimulantia. 1 of Rubefacients. there are a thousand modes of producing a rubefacient effect. Frictions in cases of drowned persons. palsy &c. in pneumonia Typhoidea, frictions have been found very beneficial among the chemical remedies, heat may be used and is generally attended with good effects, bricks hot cinders &c these articles have been recommended when speaking of diaphoretics. but it is on a/c of their local stimulant effects, I mention them here. the practice of burning with moxa, is still practised on the continent of Europe. however it is only practicable in extreme cases. Dr Physick employed it in a case of asphyxia with good effect the use of warm water has been used in many cases as &c but I am inclined to think that a blister would answer better. in low cases of fever it has been used I prefer for this purpose heated coals &c. as it retains the heat better the water cools too soon and really leaves the body in a colder state, than it was before the application of cloths, particularly if they have remained on a short time. In hysteric cold feet are an attendant, and is relieved by warm bricks water &c. In Gout & the stomach heat applied to it is an excellent application

In Hemicrania I have by the application of heat relieved the pain. Several chemical preparations have been used as volatile alkali & this and other oils. Partly you make an irritating liniment. It is found beneficial in inflamatory affections of the throat. It is a very popular remedy in this country. In some cases of Rheumatism it has been found beneficial. One of the most beneficial rubefacients we have is the Oleum Terebinthina. In inflamatory affections of the throat nothing is more serviceable you know by exciting inflamation externally. You relieve inflamation by mixing Ol. Terebinthina ℥IV. & 4 ounces of camphor ℥I. you have what is called Whitehead's essence of turpentine, & by some simple addition, you obtain Dupotet's chloro Turpentine has been used in burns &c. We are indebted to Dr Kentish for this practice. It ought to be carefully applied to the diseased part, & not suffer any of the ointment to get on the sound part. It has, in a great measure got into disrepute, with some practitioners, in consequence of their slovenly way of applying the ointment. The odour of the medicine is best disguised by Ol. of Lavender.

I knew it to save the life of a child, by immersing it in a bath of turpentine. I might here mention all the aperitive oils as Rubefacients, but I do not wish to add to the list. I here ought to notice camphor, but as I spoke of combining it with turpentine I shall here pass it by. I do not intend to forget the Tar. Emetic as I observed once before, it was a rubefacient and a very powerful one, by sprinkling a little Tartar emetic on a plaster of Diffenbungendy, and apply it on the part it will in a few hours time produce a great irritation, when it has continued long enough take off the plaster. I shall notice some of the cataplasms, of these I might enumerate many but I shall only notice a few the most simple of these are the farinaceous vehicles. salt dissolved in vinegar is often used in cases of children, when we wish to add to the irritating properties of the plaster, we must use garlic, horseradish &c. The former is preferable to the latter, but a mustard is better than either in cases of extreme debility & in cases of fever, where the system is in a low state a mustard 1 part Rye flour 3. & a sufficient quantity of vinegar. Mf. Cataplasm, and applied

are found very beneficial. this is my common application in these cases. In the most extreme cases of Gout apoplexy. coma &c. we used mustard & Rye flour in equal parts as mustard and vinegar alone. I have more than once however seen gangrene to result, by the application of the tartar, So I would advise you to be cautious in its application, you ought to examine frequently and when redness appears take it off. I have used the Cayenne pepper with great advantage. We are next to speak of Vesicatoria. they are those medicines which when applied externally, produce a discharge from the skin. there are many articles which produce this effect; all those which I have noticed as Rubefacients, increased to a certain degree, produce a discharge from the skin, but we will mention those which are more properly called vesicatories. —

Cantharides. For the natural history of these insects, I refer you to the different writers on the subject. In France Spain & Italy they are very plenty. it appears they were known to Hippocrates. The arabians took more pains to discover their properties than their predecessors. they found their use in apoplexia & Lethargic cases no particular directions are necessary to make the plaster - only be careful to press the flies well in the unguentum, which is previously spread on leather &c.

By not paying attention to this particular, not a sufficient quantity of flies will adhere to produce the desired effect. in many cases the unguentum cantharidis may be applicable. this is to be made by adding finely powdered flies to unguentum Basilicum until the ointment also take up no more. this pen may be particularly applicable to the eyes, when affected &c for the purpose of expediting the blistering process. the spirits of Turpentine has been used by Dr Hartshorne of this city. I have used it and found it to assist the blister very much. the part is to be wet with spirit & the blister sprinkled &c. sometimes gauze has been used in order to prevent strangury, from a idea that the flies were absorbed &c when using of cantharidis this is wholly unnecessary, as respects the dry plaster. I cannot say that gauze is really necessary, it is essential to sprinkle vinegar on when it is necessary. the average time for a blister to remain on is from 6 to 8 hours, you will recollect however, that on the head it must remain on 24 hours. the urine discharged is different from that of the serum of the blood. BLISTERS. like bleeding are applicable to certain stages of every disease. Dr Pierce

then application under 3 different heads
1 when the action of the muscular fibre is too
2 when the action is irregular. 3 when the action is too strong. this includes every state of the system. Dr Revers Blisters have for many years been considered as some of the first remedies

They were once used in every stage of fever, but it has been found that they do little or no good, in the first stages of fever. Dr Rush says when the system is prepared, the act as a conductor to carry off all morbid matter &c if applied too early or late they are not found to be of great service. I believe that much harm has resulted, from applying them too late. The blistering point Gentlemen I do not wish to consider as a mathematical point but after the proper remedies as venesection purging &c have been used then comes the use of blisters. It makes no difference at what point the system is, as the application is to be carried to the extent of the violence of the disease. Does yellow fever require more bleeding than any other disease? why not more blistering? I have in the yellow fever frequently applied as many as 6 blisters. in Phlegmasia with general or local inflammation blisters are used. for some==ting you generally apply a blister to the stomach, whereas to apply a blister on each wrist wice produce the same effect. Dr Cullen says too much has been ascribed to the discharge produced by the blister he says they act by their antispasmodic power that they act antispasmodically & dont deny the

that fever is produced by spasm I do deny —
the phrase that they act by equalizing excitement
I also reject but will say that they act in
a different manner. If you know by exciting
inflammation externally you relieve it de=
terminately yet the effect of inflammation
is the same. how this is I cannot say but
so are the effects of the results. In order to
prevent strangury as it some times occurs
and when barley water Gum arabic too
is also you may use them. but in
most cases they are not allowable. the
best remedy I know one to be prefered to
barley water is Gum arabic. tea is an
anodyne glister and it generally relieves
strangury. cases very unequal in
Typhoid fevers (cases). I remarked the
utility of Rubefacients, and in some of
those low cases Blisters will not rise &
in those circumstances they gene=
rally terminate in gangrene. when
there is any doubt of blisters as respects
the blister not rising, in consequence of
the state of the system being very low in:
those circumstances you must ap=
ply them to the upper extremities, as they
have been found to retain the powers of
life much longer than the lower. In
the phlegmasia they are found highly
beneficial in those cases their invariably
seem to do good, by stimulating the vigour
of the whole system. In Albania you
shave the head and apply a blister externally

Which when inflamation is produced the disease is relieved internally. In Pleurisy you apply a blister or the therapeutic &c. In Opthalmia you produce an inflamation externally. In those diseases which Dr Rush terms intermittent diseases (fever) they are very useful as in obstinate cases of diarrhoea they may be applied on the abdomen, sometimes in this disease, medicines are found to have no effect untill Blisters are used. In spasmodic cases they are useful, as generally in asthma epilepsy &c they have been recommended by Hoffman and many others of the older writers on those diseases. —

In Pulmonary Consumption they are good, and in some instances have been attended with the most happy effects by applying them on the thorax.

Lecture 47

In Cynanche Trachealis after bleeding emetics & purges a blister is of extraordinary advantage. In all other inflammatory affections. In Cynanche Parotidea when the testicles inflame the application of a blister is recommended. In Sciatica Dr Barton recommended a blister behind the ear, and in all diseases in certain stages, they

act by evacuating & by a specific impression? Blisters applied immediately stop gangrene. Dr Physick always resorts to blisters. It has universally succeeded a stop is placed over the dying & gangrenous parts, this will put a stop to Gangrene, except in the gangrene of the toes in old people. Dr Dorsey says he has put a stop to mortification by a blister even in a case of this kind. I shall now commence to speak of Lytta vittata or potatoe fly (vide Coxe dispensatory) first introduced into practice by Dr Chapman of Chester County Penna from the potatoe vines Dr Gorrums of Massachusetts

Dr Schott made this the subject of his inaugural essay, made experiments and found that they produced blisters in a shorter time than the spanish fly. of the powder he made a plaster that produced a blister in 5 hours and some in 3 hours, and that they are superior to the Mylabris vesicatoria

the saturated tincture produces vesication. the tincture & powder both produce strangury &c
Dr Dorsey from his experience says, that the difference between the potatoe & spanish

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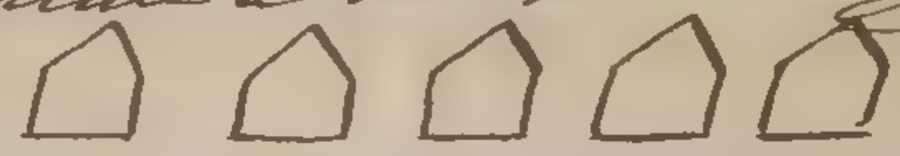
fly is very small. I think one is as active as the other. Mode of applying Blisters. To the head the head should be shaved previous to their application. The plaister should be of large as to cover nearly the whole cranium of an oval form, nicely cut in the edge to allow it to lay close. A handkerchief bound around the head to keep the plaister in contact with every part. In shaving the head particularly in ladies, leave the hair stand on the front part of the head as they use then have no occasion of wearing wigs. Sometimes a blister to the back of the neck will answer the purpose, and saves the painfully hair. It is to be cut in the shape of half a moon, holes in the corners for strings to go through. For the ear lobs cut in the same shape. & for the forehead in the same manner. For the eyelids in the shape

about the size of a dollar, I formerly applied adhesive plaster over the eyelids to prevent any of the flies by getting into the eye. But the pelican bill is unnecessary as the tears will wash out any particle of the fly which has got into the eye.

For the epigastrium in the following shape



For the throat a small oblong plaister is to be used, but when we only want to blister the tonsils the following is to be used. The middle [illegible] not to be spread with the flies. All other parts of the body are to be blistered with one or more blisters.

Cauterium Actuale

Actuale cautery, is but little employed at this time. They are occasionally used in the Jewish hospital. Dr Valentine mentions, that Mania & Epilepsy are relieved and cured by it. he actually cautery highly applies them to the occiput. I shall only remark that issues and setons answer the same purpose.

Moxa. Burning Moxa on the body. The Indians use them, and I hope our modern medical brethren, will not resort to this savage practice.

Setons and Caustics. the seton is generally applied to the back of the neck. the Diseases are chronic in which blisters are useful. In head ache of the perpetual kind. chronic inflammation of the eyes ears & erosphulous joints, in the healing up of old ulcers in chronic affections of the lungs, always near the affected part. In chronic

Cases to the left arm in the deltoid muscle (vide elements of Surgery vol 2.)

Caustics.

these destroy the texture of parts. they excite an action which the vitals powers cannot overcome. by adding quicklime their action is chemical Van Helmont was the first who appreciated that they have no power on the dead body.

Caustic Potash.

Prepared by adding quicklime to the carbonate of Potash This is the most powerful of all caustics made into moulds is very deliquescent is to be secluded from external air. kept in bottles well stopped. is to be applied cautiously, not too deep as it might if near any artery produce a sloughing which would be a serious consequence If left too long is apt to produce a large ulcer by spreading. Its deliquescence renders it extremely proper in old ulcers with callous edges

In opening abscesses it is better adapted than any escharotic as it will soak and spread as before mentioned into the abscess. In making issues it is immediately neutralized by vinegar on that occasion it is useful in burning fungous tumours of the mouth.

The mineral acids act rapidly as escharotics, especially the sulphuric and nitric acids but from their fluidity they can seldom be conveniently used.

Nitrate of Silver. Is a caustic to be used in cases where escharotics are to be used it changes the condition of parts and renders them ready to heal producing healthy granulations. this is to be used in chancres. this preparation is obtained by dissolving silver in nitric acid, evaporating the solution to dryness melting the mass by a gentle heat and while liquid run it into cylindrical moulds, in which as it cools it becomes concrete

Sulphas Cupri. Red precipitate burnt alum caustic sublimate and arsenic are all used.

Juniperus Sabina. (Savin) the leaves as I have before mentioned possess a acid power when they are simplicia. the powder sprinkled on warts or excrescences removes them is used as an application to old ulcers keeps up a discharge from an issue. It will not excite the angry as an cantharides does. It made into an ointment in the following manner

℞. Powdered savine leaves ℥ss.
Lettuce Lard – ℥ss ij.
Bees wax – ℥ss

I have now finished with epispastics at my next lecture I shall commence with stimulants

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Lecture 48th

Stimulants or Excitants are those medicines which produce new actions or impressions without an evacuation. In the great majority of our diseases, the only stimulants which are necessary after abundant action is reduced, are the lightest kinds of food. Stimulants differ in the parts to which they are to be applied

Particular Stimulants

Heat and cold temperature is of great importance in diseases as in asphyxia, heat is employed operating as a stimulant, and in cold extremities on the approach of death. Cold water in syncope is a well known article, and the affusion is valuable in some

stage of fever. Friction by means of the flesh brush in syncope asphyxia paralysis extremely valuable. In-ammatory chronic inflammation especially of the joints. palsy in consequence of a bruise. Galvanism and Electricity. Electricity is the most powerful.

Diffusible Stimulants

In my opinion Dr Hamilton has very improperly placed narcotics as diffusible Stimulants. I shall retain the old (sedative) Volatile Alkali. found in animals and vegetables by putrefaction. The caustic is obtained from the muriate of ammonia by distillation from lime the carbonate by the same means from chalk carbonate of ammonia or volatile salts is given generally in form of volatile julep which is prepared in the following manner ℞ Gum arabic & sugar ℥i each

Volatile salt. — ℥ij

Aqua — ℥W

Every spoonful contains 5 grs of the vol alkali, if you add Cau tartar 1 drop to every gr vol alkali. is is give every ½ hour

1.2. a 3 hours. Its effects are transient, proba-
-bly there is no medicine so evanescent
Therefore it requires frequent repetition
is used in many fevers, in the exclusive
of our Bilious Fevers it is useful. In
Rheumatism Vol. Alkali combined
with Guaiacum (vol. Juice of Guaiac)
In Gout when it affects the stomach
it is very beneficial. It is much used
in Pleurisy, after the inflammatory ac-
-tion is reduced. It is a valuable
expectorant, and is the safest stimu-
-lant that can be given in those cases
In the Pleurisy of drunkards after a few
purges, the Vol. Julep with a little
Calcd amm. In Bronchitis, it relieves
the dry cough promotes expectoration
relieves pain. In asthma. In Dyspep-
-sia especially when there is palpi-
-tation of the heart, it seldom fails
to put an immediate stop. In Dys-
-pepsia it relieves acidity by its al-
-kaline property, and renders oil
digestible. In Diarrhoea and Dysen-
-tery I have never seen it used in these
diseases unless recommended it. —
In the Neurosis. In the stomach
affection resembling apoplexy it is
of great importance. French Physicians
use it in this case. In water Brash.

In Cancer it is recommended but I do not think it of any service, but in Scrophulous ulcers the fumigation of the ulcer by throwing the alkali on a red hot Iron. — I have seen good effects

It has been recommended in the bite of the rattlesnake used in Asia & Africa I have no experience in this case

In asphyxia & Syncope. In the low stage of fever bilious & yellow it may be given in large doses Dr Heintz Recommends it highly who analysed the black vomit

Aqua Ammonia is used in the same case but I prefer the concrete salt is made by combining ammoniacal gas in water. Next we shall consider the

Diffusible Stimulants

The effects of ardent Spirits in a moderate dose is a stimulant increases the frequency of the pulse secretions &c but this is transient, in a few minutes the pulse becomes languid. Sleep comes on &c and in large doses is a narcotic. I have seen a young Man who took 1 pt. of Brandy & immediately expired. alcohol In some patients who have been accustomed to ardent spirits we have to prescribe it in cases where the inflamatory symptoms would forbid it in other cases

When we prescribe alcohol we use Pure wine brandy &c Wine has more of the tonic & less of the diffusible effect. Most liquors contain a nutritious quality ardent spirits is never to be prescribed in cases where inflamatory action is present except in cases above mentioned where nervous symptoms occur wine whey is a very good form. In bilious inflamatory diseases stimulants are not to be used unless the action is completely subdued. But in most of these cases a low diet is generally sufficient. In intermittents wine is to be used during the apyrexia. In cases of Dysentery the port wine as having an astringent property is best adapted. In Typhus we can begin with wine whey wine punch brandy Laudanum &c to obviate the debility arising from brandy it is to be used frequently when the remedies produce a flushed face & febrile symptoms they are to be stopped. a delirium in those cases is not a sufficient reason in these cases to lay it aside.

Lecture 44

Of Diffusible Stimulants. Of Alcohol.

By the process of Vinous Fermentation a product is obtained which combined in the fermented liquor, gives to it its peculiar properties, pungency & spirituous flavour, & intoxicating power being volatile it can be obtained by the process of distillation and in the diluted state in which it is at first procured from the spirituous liquors of commerce. by repeated distillations it is obtained more pure and concentrated and then forms what was named pure ardent spirits, by chemists alcohol. this operates on the living system as a highly diffusible stimulant, taken in a moderate quantity it almost immediately increases the force of the circulation, communicates a greater degree of muscular vigour & activity exhilaration of mind these gradually subside & are followed by proportional langour. if the quantity is more considerable its exciting effects are more quickly produced & are followed by a tolle collision temporary delirium & stupor & in a large dose occasions death, with scarcely any symptoms of previous excitement. Its analogy in

producing these effects to other narcotics is sufficiently obvious. Its exciting power however appears to be rather more permanent than that of some of the other medicines of this class, and hence while it can be successfully employed to raise the powers of the system it can scarcely be used with equal advantage to repress irregular action diminish irritation or induce sleep. It is also an important pharmaceutic agent. The relative quantity of alcohol which you procure depends upon its strength. The different degrees of strength I have already mentioned to you in a former lecture —

Of Alcohol. Spirituous liquors Wines & fermented liquors owe their intoxicating powers to the portion of alcohol they contain. This opinion has been advanced indeed, that the alcohol they afford does not preexist in them before but is formed during the distillation this opinion resting on facts that the alcohol cannot be procured from them in the same quantity by any other method & that when the product of the distillation is added to the residual liquor, wine is not produced. Modern a Wine is about half as strong as brandy according to the experiments of Mr Brand

From the immoderate and long continued

use of various Spirituous Liquors many diseases derive their Origin as Dyspepsia Hypochondriasis viscerae obstructions Chronic inflammation of the Liver and Gout. Such a State probably arising either from the increased action of excites giving rise to organic derangements for from the exhaustation of power general or locally produced by a stimulant operation unnecessarily excited or too long continued Dyspeptic patients will be temporarily relieved by brandy & water If the disease is increased it will generally terminate in a hepatic disease or Rheumatism

When Alcohol & Mineral acids are distilled ether is formed. I shall first mention sulphuric ether this is formed by the action of Sulphuric acid on alcohol, and is the one which has been chiefly employed in medicine It is obtained by operating a mixture of Sulphuric acid and alcohol in equal weight (weights) to a heat sufficient to produce ebullition it distills over & is purified by a second distillation.

When it has acid properties add an alkali which will abstract the acid and form a Neutral Salt. It is colorless & transparent highly odorous and pungent. So very volatile that it evaporates speedily at common temperatures, & from its rapid transition to vapour produces much cold. Is highly inflammable. For further information I must refer you to the Professor of Chemistry, who will give you all the instructions for the preparations of this article. — Is a powerful diffusible stimulant somewhat analogous to alcohol in its properties but is a quicker stimulant. It is given with advantage in the hysteric paroxysm. Gout &c. A strong dose is a teaspoonful equal to ½ i but its beneficial effects are frequently not obtained unless it be given in a larger dose & repeated at short intervals. The Ether is best taken owing to its volatility in sugar and the patient is directed to swallow it immediately. There are many preparations of this article as Hoffmans anodyne which is made by adding the Ethereal oil (a product of distillation of the Ether) is added to the diluted ether.

Sulphuric acid is twice as heavy as water 4 times that of Ether. Oil of turpentine is also to be considered as a diffusible stimulant. I have already told you of its efficacy in worm Dogs &c. In the latter stage of yellow fever Vol. Alkali is better than Ether. It may be given mixed up in the yolk of an egg, or in admixture (may be disguised by the essential oils) is a valuable article in relieving spasms of the bowels.
In Epilepsy Dr Lehman used it with success. this may be useful when the disease is occasioned by worms.
I shall now proceed to speak of vegetable stimulants. 1st Capsicum Guinea pepper Cayenne Pepper. E & W. Indies - africa the fruit of this plant is an oblong pod of an orange color and a pulp inclosing seeds the membranous pod has a odour aromatic and penetrating, which is prepared by drying. Its taste is extremely hot and acrid the sensation which it excites remaining long impressed on the palate. excites considerable warmth on the stomach Capsicum is a very powerful stimulant but has no narcotic power. as much (stimulant)

It is given in atonic Gout. In Palsy and Dyspepsia and in the latter stage of fever where the powers of life are almost exhausted. It is also used as a condiment. The dose of the pod is from 5 to 10 grs. It is best given in the form of pills with syrup or conserve of roses. An infusion of it in vinegar with the addition of salt is used as a gargle in Cynanche is made in the following manner. take of Capsicum 2 tablespoonfuls. Muriate of Soda 1 table spoonfull
1 Pt of boiling water
1/2 Pt of vinegar

Dose tablespoonfull, as a gargle this is used in the Southern States in Cynanche malignia as I have been informed by my medical friends with advantage.
I have no experience of its use in this disease.

Piper. Nigrum Black pepper or common culinary pepper has the same properties only differing in degree

Acorus Calamus. Sweet flag radix is a perennial plant grows plentifully

In Rivulets & marsh places abundant in America the roots are full of joints crooked somewhat flatted on the sides internally of a white colour. The taste warm acrid bitterish & aromatic both smell and taste are improved excication, is sometimes made use of in practice to relieve flatulency.

Ammomum Zingiber. Ginger Radix / India This plant is cultivated in the W Indies whence the dried Root is imported, having an aromatic odour and a very pungent somewhat acrid taste which is very familiar to you gentlemen. It is therefore unnecessary to dwell on it. It is given diluted in combination with other remedies to promote their efficacy the following is a prescription which I often use in Asthma Viz. to relieve flatulency. Rhubarb ℥i

Prep. Stac ℥i

Ginger — ʒi. divided into 12 Powders / every morning & evening. Caraway. Allspice. Nutmeg &c are all Stimulants, but tis not necessary to dwell on them. All the Aliaceous plants possess stimulant powers. I shall next speak of Narcotics. they are also named sedatives from their power of diminishing action. Anodynes

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From their capability of alleviating pain and hypnotics or soporifics from their power of inducing sleep. the term Narcotic is of greek origin
the following are the general effects resulting from the operation of Narcotics. In a moderate dose they increase the pulse promote the secretions, give vigour to the bodies and make the mental faculties
renders its conceptions more vivid & forcible & induceing hilarity or intoxication. these effects are however only temporary & after some time symptoms of a soporific kind make their appearance. the pulse not only returns to its former standard but becomes more full and at the same time full & soft the respiration is more easy. the secretions excepting by the skin are diminished pain & inordinate motion if present are alleviated or repressed there is a general languor & uneasiness to motion & dullness of sense the mind is placed and inactive a state which generally soon terminates in sleep. this after continuing sometime, is succeeded by temporary debility marked by some degree of sickness

tremors anxiety and oppression if the dose has been large these symptoms of diminished action and sense are induced even without any previous increased action as if a stiff larger dose has been given, the immediate consequences are delirium paralysis convulsions coma and death.

I shall first speak of **Opium**. It is procured from the white poppy (Papaver Somniferum) a native of the warm regions of Europe and Asia. It also grows in colder climates and without any diminution of its powers by incisions made into the large capsules which it bears a milky juice is obtained which by exposure to the sun and air becomes concrete & of a brown colour. this is named Opium. the leaves & stalks afford by expression afford a juice but inferior in narcotic powers. the seeds are inert. I should be sorry if it were cultivated in this country as it would in all probability produce a consumption of it as amongst the Turks.

It is of a dark reddish brown colour when cut it presents a substance soft and unctuous having an odour somewhat foetid and a taste bitter and acrid we receive two kinds of Opium Turkey & E India the latter is of a superior quality. Though Opium has been submitted to analysis its peculiar principles are still imperfectly determined. It is highly inflamable. When submitted to the action of Alcohol a considerable portion of it is dissolved water likewise extracts a part. The solution in the former is much more highly impregnated than in the latter and it possesses the narcotic power in a much higher degree. Diluted alcohol or brandy dissolves all its active matter. Boiling in water impairs it much. This is one of many proofs that chemistry can give us instruction.

As it partly soluble both in water & Alcohol one appears to suffer decomposition It appears to be a G. Resin combined with other properties. Opium has an astringent property. as it will strike a black colour with sulphates

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The extract is made in the same man=
=er as other extracts by boiling it in water
and evaporating to dryness. From the
Lactuca virosa or strong scented let=
=tuce a substance similar to opium
has been obtained. The effects of it are
similar to that of opium. The dose
is from 5 to 10 gr. There was at one
time a great controversy between
Cullen and Brown respecting the
stimulating qualities of Opium &
Brandy. The latter contended the
identity of the substances and the
former the contrary. When brandy
is taken into the stomach in mode=
=rate quantities, it produces mere=
=ly a stimulant action in every the secreting
the mental faculties are invigorated
the pulse is increased. When opium
is taken in a dose of ½ gr. the
pulse becomes accelerated in force
and fulness, augments the animal
temperature and gives vigour to any
function of the body and mind oc=
=casioning after intoxication and deli=
=rium there are succeeded by dim=
=inution of the tonicity and quickness
of the pulse by lassitude & languor
sensibility and sleep. and these again

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are followed by sickness headache thirst vomiting and other symptoms of debility. The primary operation is therefore evidently exciting, and the state of diminished susceptibility and action which follows, must be considered as the effect of this conformable to the general law that excitement suddenly raised is followed by exhaustion of power.

Count Dumas made a number of experiments on the pulse in five minutes

in order the force and fulness of the pulse

In large doses symptoms of diminished action appear without any previous excitement and are followed by delirium stupor deep and difficult respiration convulsions & death and it has fallen to my lot to be called to many patients who had in intention committing suicide always found the pulse full strong quick and not frequent.

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Lecture 50th

On the Morbid effects of Opium.

I have seen persons who took 4 oz of Laudanum with a strong active pulse this was followed by Stupor Delirium &c there are no cases that demand your attention more, than to these deplorable persons here immediate attention is demanded, you have no time to refer to books, as in the operation of Lithotomy, you can prepare your instruments and read on the subject. The Physick who relieved many in this deplorable state was thanked by them afterwards when opium has been taken in large quantities & you are called in immediately Give powerful emetics immediately & in large doses the best is sulphate of Zinc in dose of ℥i. dissolved in water repeated as circumstances require. In order to produce immediate vomiting we irritate the upper part of the fauces (Oesophagus) with a feather. Diluents have been given in order to promote the operation of the emetic

Immediately after the exhibition, but this is improper as they will cause the emetic to pass off by the pylorus and act as a cathartic. It is always best to wait until vomiting has commenced then Diluents will promote the operation of emetics. When the second stage comes on which is in 3 minutes pulse full and quick not frequent. Indication to remove the remote cause, with the view of accomplishing this Doctor Physick has contrived a tube or catheter by which we can remove the contents of the stomach. It is not to be understood that you shall wait until the second stage appears. by no means! on the contrary use the catheter immediately. He was the first who used it, and a woman who took several ounces of Laudanum and in a young man a foreigner who was in distress for pecuniary wants he took a large quantity of Opium with the view of putting an end to his existence. he was resolute in his determination. He at first refused the use of the apparatus.

But at length succeeded. I used it and fortunately succeeded. Dr Physick has published in the last volume of the eclectic repository. Vide two children who accidentally took Opium, one recovered and the other died. When the effects of Opium advance the free dilution of vegetable acids or vinegar should be used, which are to be swallowed in as large draughts as the stomach can receive it. The powers of the stomach and of the general system may be roused and sustained by small doses of warm brandy to put of the stomach. The patient ought to keep in gentle motion at least for some hours. In these cases after a short time the pulse becomes full and febrile accompanied by a phrenitic state of the brain. At this state venesection is most imperiously demanded. Dr Seaman of N. York used the stripes of the rod to a patient which relieved him. It has been said that inflamation of the stomach is the consequence of taking those Narcotics this is common

They produce their baneful effects in an over dose in too short a time for inflammation to take place. The smallest dose which I have known to produce death was ℥ss. By habitual use the effects of of Opium is lessened. The Turks use it as freely as we do wine. The agency of Poison is alike in every respect to brandy in dose the same symptoms. Red eyes bloated countenance gutta rosea.
Fatuity indigestion debility indurated glands especially liver accidental disease of trifling importance produce alarming symptoms called chronic a Potu.
In such cases we must abstract the usual stimuli and substitute some other as an infusion of Lupulus communis. of this I shall speak hereafter also Asafoetida and Musk those of you Gentlemen who attend the hospital will recollect the prescription I used in several cases of chronic a Potu it is as follows

MUSK
Vol. Alkali — aa ʒj.
G. Arabic — ʒi
Aqua Fontana — ℥iv.

Dose a table spoonful every hour.

By these means I broke a man of the habitual use of Laudanum he took ℥viij a day for 4 months in the Asylum house purging by emptying it through the bowels according to the exigency of the case I have now finished the sedative power of opium and shall next proceed to speak of its use in diseases.

We use opium to relieve pain & to procure sleep. we have no article which possesses such hypnotic power. we give it to relieve spasm &c when we use it we must recollect that we can obtain a stimulant and sedative property. I shall first speak of its use in fever. 1st In continued fever, not inflammatory, Opium is administered sometimes as a general stimulant, but its operation being less stimulant than that of bark it is not so well adapted to obviate debility or at least with the intermission it is employed only as subsidiary to wine. It is more frequently used to diminish irritation & lessen that state of increased susceptibility to impressions connected with debility which frequently gives rise to wakefulness.

Watchfulness. delirium and spasmodic affections particularly tremors and subsultus tendinum. A full dose is usually given at bed time. and to obviate these symptoms when they are urgent it is further occasionally administered, generally in combination with wine, in the course of the day. Its exhibition is improper and requires to be conducted with much caution when there is any tendency to local inflammation, or a determination to the head. If it increases delirium it is absolutely injurious. this is the practice but as I have already mentioned in a former Lecture I never see a continued fever. **IN TYPHUS** I never saw a case in which opium or any stimulus could be given, in the very beginning. wine has been substituted by some for opium I do not approve of it. I want you to know that opium has a stimulant and depressing power and I want you to know that you can obtain either in many cases. in fever it is not always proper to give opium. in the first stage I have seen 1 gr. of op. prove fatal.

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The patient fell into Coma & died in 12 hours. He was bled once, if he had been bled a second time in all probability he would have recovered. When Diarrhoea comes on in fever Opium will restain it in the latter stage of the fever if Julepsulphy occurs Opium vol alkalies are beneficial. In continued fever Opium in my opinion is a dangerous remedy if abused, but if properly administered it is useful

Lecture 51st

At my last lecture I mentioned the medical effects of Opium. I also mentioned to you afterwards its use in fevers. I shall proceed to speak of its use in intermittent fever. It was formerly much used but the introduction of Peruvian bark has superseded its use. If it is given in this fever it ought to be combined with peruvian bark. Dr Lind gave it in the hot stage I am altogether opposed to this practice my experience teaches me that it uniformly aggravates the paroxysm

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as Dr Lynd practices chiefly in warm climates where there is a habitual tendency to perspiration. Perhaps the salutary effects which he ascribes to the medicine may have happened. I do not approve of its use in the hot stage. before vaccination have been premised. It is given in coffee & vegetable acids. by some It is known that the acids have a antimercurial power. as before mentioned it may be given in combination with Peruvian Bark given before the accession of the cold stage. Dr Physick gave it in this manner in the cold & hot stage, and has greater confidence in it than I have for the hot stage

In Yellow Fever. at the last stage when delirium &c come on, it is improper as in the low stage of typhus. It is best to give it in combination with volatile alkali in the yolk of an egg or other nutritious articles. Opium has been combined with emetics Dr gave this combination in Typhus fever, given with the intention of procuring sleep but this cannot be

accomplished where high excitement attends, this will apply to every case where there is high excitement we cannot procure sleep. In the phlegmasia the employment of opium is from its stimulant operation more doubtful & in any phlegmatory affection attended with higher increased nervous action must be hazardous, when it is given so as to determine its action to the surface of the body & produce sweat it is often advantageously used particularly in Rheumatism or the other diseases of this order when the inflammatory stage has subsided, its exhibition is occasionally necessary to obviate symptoms connected with irritation In Odontalgia & Paronychia opium will but add, by its stimulant effect to increase the disease but will alleviate pain. In Phrenitis. It is highly injurious depletion must in this case be carried to a high extent. You have already learnt from the Professor of Surgery how to treat inflammation. It is therefore unnecessary

for me to dwell on it. In Gangrene of the feet & toes of old people, you have been already told by the Professor of surgery. Dr Pott used it with decided effects. In surgical cases it has been dreaded too much of its stimulant effects in these cases. It is given in tooth ache & Paronychia to allay pain. In Ophthalmia. In this I shall say little of its use. In the acute stage is highly injurious after bleeding &c. may be used to relieve pain as a collyrium I shall speak hereafter. In Pneumonia. is an excellent remedy after the inflamatory symptoms have been subdued. it promotes expectoration i.e. if preceded by venesection you may obtain its expectorant effects.

In Pleurisy. after the use of the lancet it is a valuable remedy

In Catarrh. when accompanied with fever & pain in the chest is inadmissible but depletting remedies are here valuable when cough & mixtures are admissible the following is a valuable one

℞ Succ. Opii. LX
Antim vinum ʒj or 4gr
Ipecac.
Gum Arabic ʒij or ʒß liquiritia
Ol. of aniseed gutt. VI
aqua. — ℥ VI
mix. —

Dose a table spoonful 3 or 4 times a day as occasion may require, another formula to which I required from Dr Hetherington

℞ Emc. Bal Solutanum
Elixir Paregoric aa.
Dose table spoonful every 3 or 4 hours

In Pertussis. It will relieve inoculation but never give it in recent cases, always to be preceded by venesection &c. where the inflamatory symptoms are subdued and not like them.

In Pulmonary Consumption. In the latter stage when recovery cannot be looked for then it is valuable, when dyspnœa is attended with frightful dreams will allay cough & is in these cases a advantageous.

In Rheumatism. Is given in form of Dovers powders but will not answer in its inflamatory stage many of my patients in this stage have derived much more benefit by the use of the lancet as an anodyne.

In Chronic Rheumatism Is a valuable remedy.

In Syphilitic Rheumatism. Is valuable in combination with calomel, so as to produce a ptyalism. The Opium will restrain the cathartic effect of calomel. Gout. The same rule is applicable to this as in other inflamatory diseases.

In Retrocedent Gout opium is useful
Brandy syn opsinus applied to the re-
gion of the stomach will relieve this
nearly in every case. I have given to a
relation of mine 1/2 ℥ of Laudanum
but gentlemen do not quite always
authority of giving such a dose and
do not imitate me in this point
commence with small doses unless
you are acquainted with the hab-
it & idiosyncracy &c of the patient
In inflammation of the viscera of
the abdomen as liver bowels &c
preceded by depleting plan
In Dysentery will alleviate pain
always be aware of its stimulant
power. give it according to the state
of the system
In hemorrhagy not connected with
a state of highly increased action of
the blood vessels opium is a valua-
ble remedy by removing that state
of increased irritability, whence
the hemorrhagy frequently arises
In Menorrhagia Dr Cullen now
found it useful. in combination
with acetate of lead is much used
this and many other hemorrhagies
In Hemoptysis when the hemorrhagy

Is caused by coughing, it is useful by allaying the irritation which produces the coughing but when blood accumulates in the which excites cough, and a discharge takes place it is highly improper. In the exanthemata Opium is employed with similar intention and is often more peculiarly advantageous by lessening the irritation connected with the eruption. In small pox it is peculiarly useful with this intention after the eruption is completed where it is copious and if the concomitant fever be of the typhoid type the same advantage is derived from it as in pure typhus. In measles the state of the system being more purely inflammatory its use is rather contraindicated. In Scarlatina, not in the early stage, nor until the inflammatory symptoms have been subdued. In Dysentery. In form of enema to allay tenesmus, & terminate griping gtt 60 guttæ in 1 ℥ G. Arab. this I have already stated is a fever in toto.
In colic both by mouth & by injections it sometimes purges owing to Idiosyncracy

To its antispasmodic power flatulent colic is relieved followed by Enemata of Ol. Ricini.
In Bilious Colic after venesection and purging it is often useful and in flatulent a single dose is sometimes sufficient. In acute Phrenitis it is inadmissible but in Mania attended with a cupid state of brain, Opium is used. Dr Physick gave 27 grs a day with powerful evacuations in a recent case of Mania & cured his patient in 4 weeks. In this disease large doses of Medicines are always necessary. In a case of insanity I have given 40 grs a day in Melancholia it is valuable. And also in this species of Mania from intemperance. In Tetanus it is the only remedy. I refer to
a species of Hysteria considerably like and requiring the employment of venesection purges & diaphoretics. I do not pretend to say opium will cure it but it will do more than any or all others. It should be given in very large doses. Carry it to the extent of producing sleep or whatever quantity if necessary the change of the pulse & natural effects, are the evidence of its

In Hydrophobia I am desirous of giving the opium carried to still greater extent and merely in this case if in any should we be justified in proceeding with the use of it to a very dangerous extent nearly to produce death

Lecture 52nd

In Epilepsy opium is useful in some cases. Dr Chapman supposes it a gastric affection thus this is often the case we do not deny but as it often arises from other causes, remedies acting only on the alimentary canal should invariably be successful. I have given large doses to a patient at bed time his fits coming on in the night but could not perceive that it did good or harm. I do not however condemn it. When an epileptic tetty place Opium is serviceable. A sense of coldness or actual pain are symptoms when cullen says Opium is useful. In hysteria Opium is valuable but as it is often accompanied with high arterial action requiring venesection to reduce it and let loose excitability. In asthma it is very useful when venesection is indicated.

the latter is to be premised. Palpitation is frequently a symptom of Dyspepsia and I have commonly used Vol. alkali with very great success, with or without Opium. It continues a long time and we shall often be called upon for it. Opium will palliate but not cure. In Angina Pectoris small doses of Laudanum are recommended by Heberden. In Dyspepsia it will palliate some symptoms, but it often causes that disease. In Syphilis it was formerly much exploded. It is a valuable medicine during the exhibition of Mercury a watery infusion as a gargle. I might here close the list of diseases, but shall consider its use in Surgery. In Lithotomy Opium mixed with conserve of Roses and made into pills introduced into the rectum, divides of giving it. If given in substance, the dose is 1 gr. it is supposed to have a more permanent effect than in a liquid state the pills are made by rolling them

I have considered this as the most form of giving it when we wish a speedy operation the powder is to be prepared if the form of pill is preferred, the powdered opium may be made into a pill with conserve. G. Arab. Bread &c

But always to be fresh prepared
when we wish a permanent operation give the opium pill. Laudanum.
1 ℥. Opium to 1 ℔ alcohol. 1 oz laudanum contains 28 grs of opium 1 drach 3 ss grs. and 25 gutts 1 gr. this is perhaps of equal strength with any article used. If Laudanum is kept a considerable time the opium is deposited superacid liquor is weakened the alcohol if the bottle is uncorked the bottom is much stronger in proportion to the evaporation and deposition.
In these circumstances I have known 2 grains of Laudanum produce death therefore be on your guard in prescribing small Laudanum. 25 gutts for an adult. to be varied very much - 10-15. years 10. 15. gutts according to circumstances / 1 gutta for a child within a year / In some cases we are obliged even to give it in larger quantities when given to children within a year ⅓ gutta in a teaspoonfull of
Tinct Opii Camphorate. as more agreeable to the palate than Laudanum. I never prefer the paregoric to Laudanum 1 ℥. contains 2 grs.

The Edinburgh dispensatory 1 Dr. containing 8 grs! this is another objection. The remedy 5 gutts within 1 month. a vinous tincture of Laudanum is little used in this country. We have recommended it as a Sollynium a watery infusion is sometimes prescribed & employed as an injection the use of opium by the stomach is precluded by nausea & other circumstances. here use it externally or in enemata. the opium plaster is made by softening the opium with spirits & spreading it on leather. Poultices of opium. In these I have not much confidence. Opiate lead It is however useful in several pains as toothache hemicrania & tic Douloureux. anodyne Injections. In common cases we may use Laudanum, generally mixed with mucilage of G. Arabic starch water &c. For strangurious cooling clisters & in tenesmus it is very useful. In some cases we are obliged to use opium mixed with water and starch. In of the rectum and uterus I've evinced have

Gives Opium Pills introduced into the Rectum with great advantage
I have now finished with this valuable medicine. Hyoscyamus is a active article all parts have medicinal virtues. The extract is principally used. It has long been known a violent poison. Its effects are very analogous to those of Opium and next to that article is the most certain Hypnotic. The pupil of the eye is greatly dilated by this and other narcotics. Were I called to a poisoned with this I should pursue the practice pointed out in speaking of opium, especially washing it out. The dose is 1 or 2 grs gradually increased. It is principally used as a substitute for Opium, whenever we are to avoid constipation. Dr Barton tried it in chronic Q he says, in 1 case with great effect. In Epilepsy it is to be used only when opium is contra indicated. Dr Bruce recommends it in combination with Squills & Sitre, and in asthma.

℞ 3 grs ext Hyoscy
10 gutta cibe. Squills
8 drts Nitric acid
1 ℥. water

So far as I have seen this preparation. it should be given in larger doses than commonly recommended

Lecture 53

I spoke to you last of Hyoscyamus & Sig (Black henbane) I shall next speak of Laurus Cerasus. Cherry Tree Laurel (empty) this does not grow in the U. S. as the name implies it bears a cherry the leaves are the parts used, they have an odour slightly fragrant, their taste is extremely bitter they possess a highly narcotic power. If given in large doses it produces death without a struggle no inflammation is evident in the stomach the operation says Cullen is various or languishing lets us that 13. of the infusion of the Laurus cerasus, will occasion more violent and stronger convulsions than 50 drops under do the active principle is highly volatile Chemists have long supposed it to be the nature of Bee but it appears to be prussic acid. this is the opinion of respectable writers that this is (acid) essential to the narcotic and deleterious principle of this plant it has been observed that the odour of this plant is similar to that of the cherry laurel peach blossom and bitter almond - we may prepare the medicine in the form of

Infusion and Tincture. Cataplasms of it have been recommended by Cullen as useful in some cases of Spasms &c Dr Langrish mentions that the powder of the dried leaves is much used and held in great esteem among the poor people in Lincolnshire. This is hazardous. In Pulmonary Consumption. It is given, Reduces the pulse similar to digitalis. Dose of the tinct is 5 drops. of infusion I have not employed it. I commence to speak next of Atropa Beladonna. deadly night shade. this has long been known as an active poison a native of europe. a perennial plant the whole of the plant is active but the leaves are prepared for medicinal use, as being more uniform in strength the berries were used as an anodyne but are now laid aside. In a moderate dose beladonna occasions a sense of warmth followed by diaphoresis and a disposition to sleep frequently with nausea and head ache. In a large dose symptoms of intoxication vertigo dizziness and thirst the pulse becomes low

and feeble. The pupils are dilated vision is impaired and these symptoms terminate in convulsions Coma or paralysis. Indication To remove the robbed cause by giving large doses of emetics as Sulphas Zinci or by washing out the contents of the stomach in the last stage stimulants &c to rouse the system when tempor. comes on by long continued use it may be gradually increased

In Epilepsy 2 grs D 10. chord st nitr Palsy Mania in febrile delirium action but in that state of the brain accompanied with apoplexy it cannot be admitted. It is said to be useful in intermittent fever just before the accession of a paroxysm. Dr Cullen speaks very highly of it in cancer. he says he has been a case much amended but the patient dreaded the effects of this medicine & laid it aside. Dr Dorsey seems to discredit it. it has been used in hydrophobia Dr Saunders first used it for dilating the pupils in operations on the eye (congenital cataract) a drop or 2 of the extract mixed with water

As spread on the eyelid in 1/4 of an hour dilates the pupil. Taken internally it produces the same effect. Dose of extract of belladonna 1 to 2 grs leaves 1 to 8 grains

Conia Maculatum. Hemlock not indegenous in the U. S. but grows in some parts of Penns & Virginia. it grows best in a light soil. it is also called cicuta the extract or leaves are used. Goats eat it without injurity. It is fatal to rabbits & geese. It is said Socrates owed his death to it. in small doses it produces dimness of vision & nausea. In large doses the effects of other narcotics It has been given in cancer in the dose of 2 grs. expressed juice ℥ij Baron Stoerk used it in this and he was the first that introduced it. Dr Dorsey says he has used it extensively & internally in genuine scirrhus & cancer without any good effects he has also used it in scrophulous and has found it beneficial, as an alterative combined with mercury

In Leprosy it has also been found Dr Dowsey has seen a case of scrofula of 10 years standing cured by acetate & Corrosive sublimate in 3 strength. In recent venereal bubos does a great deal of good with the salt bath. In these cases of venereal conjoined with Scrophulous this to be used. In testing indolent tumors. In these cases of Induration of inflammation when a agreable lymph is effused into the cellular texture producing tumors sometimes mistaken for Cancers. In these compounding venereal, strumous & circular are very useful. These tumors sometimes occur in the testicle and are treated in the same manner. Genuine Schirrus of the testicles is known by the lancinating pain has been given in the gangrene of the toes of old people. I do not agree with the Profession of Surgery that

I believe opium as useful as Cicuta in schirrus Chronic Nitric tar emetics do most good. In Mania I have seen it used without any advantage. J Pulmonary

Consumption of the Scrophulous kind opium is as good it only alleviates pain & this can be obtained from opium

External aplication

Internal Powdered leaves & extract.

Dose 2 or 3 grs increased gradually to 8 grs, the leaves are to be gathered when the flowers are falling off. they should be given extract is made by inspissating the juice of the leaves But should never change the parcel of any active medicine, without experimenting on it, as one parcel may be much more powerful than another very frequently you will find 1 gr equal to 10 the leaves are to be dried before a gentle fire & kept secluded from light the following is the formula which I employ

℞ Cor Subl. 8grs
Ext Cicuta 64grs

This is to be made into 64 pills and one to be given morning and evening.

Lecture 54

Datura Stramonium. An annual plant and very often called thorn apple. Stink weed most commonly Jamestown weed. Cattle frequently eat it with impunity. On the human system it produces effects analogous to Opium. Tetanus has been said to have resulted from its use. It dilates the pupil very much. The iris is almost impossible. I have seen several cases of this kind in children when large doses have been taken. The patient is treated in the same manner as when Opium has been taken in large quantity. Dr Stock employed the extract, stalks and leaves, seeds. In epilepsy, in mania and some other nervous diseases. Dr Archer of Maryland observes he has given the stramonium in epilepsy with advantage when the periods became regular. He gave the seeds rubbed up with G. Arab. in pills of 2 grs every 2 or 3 hours a low diet is to be observed. Venesection when epileptic terminates in fatuity. There is an organic affection

of the brain and nervous system are
do good, the seeds should be of a dark
colour. In otorrhoea the medicine
was tried largely in the Penna
Hospital, but with little effect.
In Tetanus it has been used by
Dr. Simms of Georgia who reported
a case cured by it. Dr Dorsey
thinks that is by no means so good
as opium. He also says that he
never saw the disease recover
from when venesection has been
used. In asthma it has become
fashionable to smoke the stra-
monium internally. It is much
less powerful than opium in the
disease. In consumption it has
been employed but it should
not be preferred to opium. It
has been said to prevent the par-
oxysm of intermittent fever in a
dose of 2 grs. In Gutta Serina.
It has been used but without ef-
fect. In operating of the eyes it
is used to dilate the pupils of
the eyes externally employed Ex-
tract dose 2 grs increased slowly to
15 grains. Saturated Tincture 1 to 15.20

Gutta gradually increased made by filling a quart bottle half full of the seeds and filling it up with spirits, the leaves stuffed with bruised and applied to the pained parts in Rheumatism & in Gout has also been used in burns where the ulcers are of the chronic kind. In hemorrhoidal affections it is in some cases useful nausea & vomiting sometimes arise from the external application of Stramonium & henbane do not constipate like Opium

Nicotiana Tabacum. Tobacco is also a powerful antispasmodic we resort to it in strangulated hernia ileus in order to relax the stricture, used as a glyster 3i of the leaves to ℔j of warm water it is dangerous in any to be injected at a time Dr Dorsey has given ℥ss. of a saturated infusion to a child in tetanus without producing any effect In S. England it has cured tetanus by glysters citric acid in cases in of the hydrophobia ~~[illegible]~~ diseases also butter saturated with salt

a solution of corrosive sublimate. Calomel Pills are used in ulceration so as in fumigation of Tobacco.

Humulus Lupulus. Common Hops It is given in doses of 3 gss infusion teacupfull Mr Cooper has cured several cases of chorea with a strong infusion of it a saturated tincture is also a very good preparation used also in some instances as a cataplasm

Nux Vomica. and several other Narcotics might be mentioned but time will not permit me to mention them (speaks of them) I shall therefore at my next lecture commence with antispasmodics.

Lecture 55th

On Antispasmodics.

Spasm is an irregular or morbid action of the muscles & muscular fibre and those medicines which relieve it are called antispasmodics I do not know that we have any medicine that is entirely antispasmodic

I shall first speak of camphor. Camphor is not the produce exclusively of one vegetable but is contained in many plants especially those of aromatic kind. diffused through the wood and bark and is often deposited from them in volatile oils when these are long kept, the oils of peppermint thyme sage and a number of others thus afford it, for the purpose of commerce it is obtained from a species of Laurus. The Laurus Camphora a native of Japan, it exists in distinct grains in the wood of the root and branches of this tree. It is extracted by sublimation the wood being exposed to heat without a quantity of water and the temperature thus communicated being sufficient to volatilize the camphor. In Europe it is volatilized by a second sublimation with the addition of half its wt of lime. Pure camphor is colourless semitransparent, unguency and somewhat unctuous to the touch its smell is strong and fragrant its taste is pungent and bitter volatile acids dissolve it, strong acids decompose it

In large doses produces nausea vertigo convulsions death &c. of its employment in diseases & its mode of operation we scarcely know any article of its precise operation. In diseases it is only admissible as a stimulant article. The opinion of old Physicians is that it acts as a cooling and sedative. I have no great experience of it and therefore can refer you to others. In Typhoid cases where opium and volatile alkali are used and when I use it I combine it with opium and volatile alkali. In intermittent fever I like many Practitioners have exclusively trusted to it alone, but better in combination with Peruvian bark altho' camphor does not act as an antiseptic is well known that Dr Seybert & others have clearly set aside the putrefactive state of the blood. In low stage of Fevers as in jails and hospitals is useful particularly in combination with vol. Alkali, & Opium. In puerperal fever when a typhoid state comes on it is useful, but in all fevers in the first stage it is inadmissible. After the bowels depleting

Remedies it is useful. In Phlegmasia
tis occasionally used, but no Physi-
cian uses it in the acute stage, I
consider it a pernicious article
in a chronic state & agree
with Dr. Barton, that it is a sub-
narcotic & useful in producing
~~a sort of narcotic~~. Diaphoresis
In chronic Rheumatism it has
been used both internally and
externally. In Epilepsy it has
been used but I consider it in
ert. In Chorea St Viti it has al-
so been used. In Mania it
has been used & tell elle an
article in the Materia Medi-
ca that has not been used in this
disease. I know of none. In puerpe-
ral convulsions I must refer you
to the professor of the obstetricae
chair. In Otalgia. It will
relieve and prevent the pain the
use of camphor. The dose
of Camphor is from 5 to 20 grs
we may give it in larger doses
I have been it given to the ex
tent of ℥j it is sometimes given in

the form of tea. This is made of following
Pour a little alcohol on it that the
camphor may be partially dissolved
then pour boiling water on it this is
a weak mode of exhibiting it &
it will relieve strangury from blis-
ters. It is also useful as an incra-
tion ℥i camphor dissolved in 4oz
oil of turpentine (oil of tar) I shall
next consider MUSK. (Moschus —
Moschus moschiferus) the animal
which affords musk is a native
of the elevated regions of ~~equal~~
the east of Asia. The musk appears
to be a peculiar secretion which
is deposited in a small sac situ-
ated near the umbilicus of the male
It is brought from China or from
China India. in small membranous
bags covered externally with coarse
hair. The musk within is in grains
is slightly unctuous of a black co-
lour, having a strong durable smell
and a bitter taste. It yields part of
its active matter to water by infusion
by distillation the water is impregnated

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with its flavor alcohol dissolves it (the impurities excepted) it is a volatile stimulant and is said to lose no weight by age. Chemistry I have not much to say it is placed under the class anti-spasmodics Dr Cullen supposed it a powerful medicine. In Tetanus. There is a case similar to tetanus in which it is used, a negro in Demerara and the form in which it is used is as follows ℞ Musk

Vol Alkali — aa ʒij
Gum arabic — ʒi
Aqua Fontana — ℥iv

Give a table spoonful every hour I think I think much of this prescription in this case. It is much used in this hospital. Dr Roe of England used it in a particular case of spasm of the throat with good effect. In Gout when the stomach and intestines are in a spasmodic state. I think it beneficial. In spasmodic Asthma much benefit has resulted from its use. In substituting Ipecacuanha I have already mentioned its use in this affection.

and think it highly useful I have used it. I have seen a slight narcotic effect arise from it. Dose 5 to 10 grains. I prefer it given in small doses frequently 5 gr. once in 2 hours may be given in form of infusion and below till I prefer it in the formula already mentioned. Also used in form of enemata but it is so expensive that I would not advise you to use it in this way. Artificial Musk has been made and it is said to be as powerful as the genuine. The mode of making it is as follows. By triturating one part of Oil of Amber with four of nitrous acid added in small portions at a time & stirring them together with a glass rod, the oil is at last converted into a yellow resin having the smell of musk and is known in Germany under the name of Musk. Castor.

Castoreum, castor fiber the beaver an amphibious quadruped is a native of the north of europe asia & america

Castor is a peculiar product collected in sacs near the extremity of the rectum in this animal. It is imported of superior quality from Russia and in inferior kind from S. England. The former is a dry slightly unctuous of a reddish brown colour intermixed with fibres and covered with a tough membrane. It has a strong unpleasant smell and little acid taste. The active matter of castor is dissolved by alcohol and spirit, and partially by water. The tincture with alcohol is least nauseous. Cullen says it is a powerful antispasmodic when given in large doses. The Physicians in the continent of Europe give it in Hysteria &c. but I think it inefficacious. Dose from 5 to 20 grs. Tinct 1 oz. Empyreumatic Oil and several others are banished from Practice.

Carbonate of Ammonia. Is so difficult to be retained on the stomach when added to empyreumatic oil, that I prefer giving it alone.

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Oil of Amber I have seen it used in Colic in large doses with benefit In Gout does good as an embrocation I would not advise you to use it as it is so disagreeable. use those which I have already mentioned. **Asafoetida**. Ferula asafoetida. Gum Resin this is so familiar to you all that I shall not dwell on the subject some use as a substitute for garlic. In diseases we employ it. In Hysteria every practitioner uses it. Cullen says it relieves the paroxysm all the fetid gums determine to the Lungs. Asafoetida has this effect and produces expectoration. In Pleurisy and other Pneumonic diseases is useful after the acute stage is subdued. In the acute stage it is injurious. It is best after, the use of the antiphlogistic plan has been resorted to. In Asthma it is given to meet two indications viz to relieve spasm & to relieve flatulency. In Pertussis. I confess I have found nothing better given in aqueous solution. formula as follows

Asafoetida ℈ ij } The dose is a tablespoon
aqua Rosa ℥ iv ℥ } full every 3 hours to
a child 1 year old after purging
with calomel in the first stage, you
will find it highly useful to avoid
obviate the paroxysm. In Pleurisy
Catarrh croup &c. it is much used Dr
Rush. Dr I found in those persons who
took Opium and brandy in excess
highly useful I have found the same
dose ℈ to 10 gr. my form of giving
it is as follows dissolve ℈ i in ℥ ij or
℥ iij Rose water Dose tables spoonfull
In the form of Glysters it is much
used in as-adelides.
analagous to this article but less
efficacious is the Gum Ammoniac
formula in which it is used
℞. Gum Ammoniac ——— ℥ ij
dissolved in ℥ iij ℥ Mucil of G. Arab —
Vinegar of Squills ——— ℥ ss.
Laudanum Gutta 60 ——
Dose a tablespoonfull I have found
this a valuable medicine in chronic
cough dissolve the gum Ammo-
niac in the mucilage and add
the latter articles.

Lecture 56th

Valerian officinalis. Wild valerian
Radix. Europe. the root of this plant
which is the part used in medicine
consists of a number of slender fi=
bres, twisted and attached to one
head, of a light brown colour hav=
ing a smell strong and unpleasant
and a warm bitter taste. It is a in=
digenous plant of Europe. Several
kinds of valerian grow in the U.S.
but are entirely different from that
we obtain from europe. Like all other
roots it yields its active property to
alcohol. Dr Cullen found it useful in
epilepsy. Hysteria & other spasmodic
affections, if a stimulant excites the
powers &c sometimes acts as an emetic
In chorea St Viti it has been used
with advantage. In hemicrania
Dr Cullen used it (Ferrier) with suc=
ces. In Richters work we find it was
used in gutta serena, nothing can
be more ineffectual than when this
is caused by a paralytic affection
of the optic nerve when it is the conse=
quence of organic derangement
as of the stomach it may be useful
In low kinds of fevers it is used in

combination with tonics and has done good in this way it must be evident to every one of you that it is inadmissible in high action as it is a stimulant, as an Authentic I have no experience. It is used in substance in infusion and in tincture in substance dose ℈j to ℈j 3 or 4 times a day gradually increased.

Crocus Sativus Saffron. this is an article which ought to be banished from the list of the materia medica. I might mention the different effects they act as stimulants and carminatives. we give them to render other medicines agreeable. **Tar**. Tar water and tar pills are used but I think the tar water is over rated, when it is used it is made in the following manner Take 1 pint tar and 2 Gally water to be stirred for several days. the pills are made with the meal flour. tar water is useful in chronic affections of the chest as a tonic. I have given it with good success in scrofulous cases. **Warm Bath**. I might mention good effects of the warm bath resulting from its use in several

diseases but the time is so short that I cannot speak of it. Garlic. allium Latinum, this as you all know has a strong odour like onions. medicinal qualities of garlic. when applied to the skin in a bruised state acts as a rubefacient we often use it as a stimulant poultice. It has been used in form of friction, the expressed juice, It has no more efficacy in the form of friction than to rub the skin with a piece of wood. In deafness it is used applied to the meatus auditorius externus. I prefer the tincture authorities. When used internally it is a stimulant it increases the pulse. the cloves of garlic are given in cholera. it always passes off by the kidneys and I am of opinion that it is taken into the circulation at least its odour. in intermittent fever it has been used. as an expectorant it is used in Catarrh croup pertussis &c. with advantage but recollect gentlemen it ought not to be given in high excitement. I might mention many others but time does not permit. and I shall next speak of tonics

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Lecture 57th

It is supposed that the difference between stimulants and tonics is, that the latter are more permanent in their action but this I cannot altogether believe. It is a difficult thing to explain the action of tonics. The term signifies those medicines which give tone and strength to the muscular fibre. I find it difficult nor will I attempt to explain the operation of tonics. They increase the tone of the muscular fibre. Tonics are those medicines which strengthen the system. Dr Gregory says tonics act by restoring the tension this is a correct idea. I will retain the term tonics.

Bitterness is a concomitant of tonic. Most of the astringents are tonic. Tonics act primarily on the stomach the action they excite in that organ is conveyed to different parts of the system by sympathy.

1 To the muscular

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2 To the nerves

3 To

4

5 To the cellular Texture

6 to the bloodvessels. In ace fetide affecting we know them to be propagated to the vascular system. In intermittent fever tonics are propagated to the vascular system

7 To the skin

I might extend this further but I think I have gone far enough. are tonics absorbed? I answer no. they act primarily on the stomach and the action excited there is communicated to different parts of the body by sympathy. the state of the system has a great effect on the admission of tonics. — sometimes tonics diminish the powers of the system. —

I shall divide tonics into vegetable and mineral. I commence with the vegetable tonics. First. Peruvian Bark. this is called by botanists cinchona officinalis Peruvian bark has been known several centuries ago. there are three kinds of Peruvian bark met at present in our shops the pale the red and the yellow leaving undetermined their natural distinctions. the species of this genus at now appears are numerous, and many of them natives of Peru. and it is not improbable that all, or the greater number of these contribute to furnish the Peruvian bark of commerce. according to Dr Powell the first is called cordifolia lancifolia (the pale bark)

Cinchona Cordifolia (yellow) cinchona oblongifolia the third a new. the tree which affords the cinchona lancifolia is of considerable height. the bark of the Cinchona cordifolia is taken from the branches and trunk of the tree and dried. the leaves of the oblongifolia are larger than those of the two former and are of an oblong shape. the tree which affords the bark is said to be 100 ft. high much has been written on the composition of the bark and the superiority of some of them which is unnecessary to mention as time will not permit. If you can buy the rock in pieces you may rest it and in powder it is inferior to the pale, as it is so adulterated by druggists that the yellow bark is preferred in this city. Dr of Virginia made experiments on the Peruvian bark and found that it increased the pulse 5 beats in 30 minutes. Its efficacy in dispepsia is a powerful tonic. Its tonic power is evident in Intermittent fever. Dr Cullen remarks at what time it proper."

The use of the bark is resorted to even in its early stage by some practitioners. It is obvious that when inflammatory symptoms presents ~~in the~~ Antiphlogistic must be resorted to, as bleeding purging blistering &c and these sometimes cure the disease. It is proper before the exhibition of the bark to give an emetic. in the distinct county it sometimes occurs with visceral obstructions. in such cases it is proper to attend to the viscera. Mercury in these cases must be resorted to. If mercury were given where no viscera has affected, it would be of no service. The remedies for the inflammation of the liver are the same as any other inflammation. The proper time for its exhibition is before the paroxysm. or during the latter stage of intermission in tertian quartan and. Dose ℥i. There are advocates, as respects the use before the paroxysm and intermission. we administer the bark as a tonic, to prevent the fever. ℥j is to be given every hour or ℈.

In the W. Indies some have given it to the extent of ℥i this I believe would cause rash practice. in fomentations ℥i pulvis to 1 pt boiling water. make it agreeable with cinnamon. qu-l ℥ every hour before the paroxysm. we often give the Sen-tonica in combination. when there is an apoplectic state. in fore the paroxysm. bark is inadmissible till venesection &c has been used. In Remittent Fever In our country is of an inflamatory kind a Remedy must be heard a Peculiarly after the inflamatory action is subdued then the use of bark is proper. In Yellow Fever. It was given by some when the fever raged in this City (Philadelphia) but all was found inefectual. and to have aggravated the disease. In this copious venesection is proper. in Typhus fever in a low stage it is highly beneficial. we resort in this stage to powerful stimulants and tonics.

In Petty Plague. I never saw a case therefore cannot say any thing of its use. In Phlegmasia the lancet is called for In Rheumatism. In our country is inflamatory. and the Peruvian bark cannot supercede its use (the lancet) In low ellimmatic. country Dr Barton recommends it in that case of Rheumatism where it occurs in such Places. In Podagra. It is generally in the first place inflamatory and requires depletion. In Hemicrania Peruvian bark is highly recommended. In Dysentery It cannot be applicable in the first stage as it is inflamatory but when in a convalescent stage is useful. It has been recommended in Pulmonary diseases in all cases which I have seen required the utmost use of the lancet. The state of the system pulse &c will be your guide. in the case of the black. In Pleurisy of the head & chest the use of the lancet must not be spared. In Typhus Pleurisy. The use of powerfue stimulants are highly beneficial.

In this case you must stimulate the detection and tinctures answer very well. In Consumption I have no use of the bark or any other remedy particularly tubercular consumption. In Erysipelas the use of bark was much employed in Europe but in this country bark is in admissible. depletion is required in this country. In some cases of our Alms house present prostration of strength in which these of tonics are proper. In Eruptive diseases always keep the state of the system in view and you cannot fail. In Hemorrhages the use of tonics are inadmissible. In epilepsy when prostration of strength is present tonics are beneficial. In chorea St Viti. Dr Hamilton's plan of purging is beneficial. this is a very uncertain disease. I have not seen many cases of chorea St Viti. In tetanus. Drs Rush & Hosack of N. York recommend it highly stimulants are highly useful in this disease but I prefer the use of powerful stimulants to the use of bark.

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In asthma it is useful in the latter stage
In scurvy combinating of serpentaria
and bermica bark are beneficial
Scrophula Dr Fordyce recommends
it in this disease and ophthalmia.
but I should use bloodletting general
and local. In Rachitis is much
used Bark shower bath sea bathing
&c are useful. as general remedies
in europe where Rachitis is much
more frequent than in this country
the invigorating plan must be
used exercise sea bathing shower
bath &c.

Lecture 58th

Application to gangrene from the
Professor of surgery you have alre-
ady learnt. that gangrene is pre-
ceded by inflammation and gan
grene treated with inflamma-
tion. he must be insane who pre-
scribes bark in the first case. it would
aggravate the inflammation. Bark has
the antiphlogistic properties. the
cure is precisely the same as when gangrene

Results from interruption of circulation. Bath cannot be useful nor any other medicine. in gangrene of the feet and toes of old people. Mr Pott says I have derived no advantage from it. I have tried in every shape to what species is it particularly useful. I answer to few. the use of blisters I have already mentioned are useful also bol. Alkali blistes &c opium &c to gangrene unattended with inflammation. I want you to lessen the high opinion of Peruvian bark.

In Poisonous wounds. Abbe Fontana recommended it I have no experience of the use of bark in poisonous wounds you will recollect that its employment in inflammation is unprecedented and hurtful. Mode of giving it is in powder in wine & bitter porter & small doses are preferable to large. astringents remain better on the stomach but it sometimes happens that the stomach rejects it in substance therefore I shall mention its pharmaceutic treatment. warm water dissolves more of it than cold water. we prefer the aqueous preparation to the alcoholic.

℥i of Peruvian bark to 1 pt. boiling water, and a little cinnamon give ⅛ part of this, to be increased as circumstances may indicate, the decoction is preferred to the infusion. the tincture is not much used. the compound tincture is much used and is made as follows, called Tinctura Cinchona Composita vulgo Huxhams tincture of bark —

℞ Pulv Peru Bark ℥ij
Extract pul of licice a a
orge pul dica — ℥ss.
Ver Snake Root.
bruised. } ℥iij
Saffron — ℥i
Alcohol — ℔ij

Digest for 14 days and strain.
I have been in the habit of adding ½ to my decoction this makes it very grateful. the tincture of Huxham is given to dyspeptic patients, but this is not so useful, as the aqueous solution. In all chronic complaints it will by its long continuance delicitate the prima via and will give a relish for ardent spirits. External application. the bark jacket is sometimes used in intermittent fever also

In form of cataplasm and bath, but this is only auxiliary to its internal administration. If the bark purges combine it with opium. If it constipates combine it with magnesia. Rhubarb. Gentian. Gentian Lutea Radix. Germany. Switzerland. This root is in long slender pieces, soft and flexible of a yellowish colour with a grayish epidermis. It has a very bitter taste without any peculiar flavour. Its bitterness is extracted both by water and alcohol. diluted alcohol is its proper solvent. It has been much used in dyspepsia hysteria and other nervous complaints, and is sometimes useful in tertian fever. Dose 30 grains. In infusion decoction and tincture. you will see the different preparations in Cooper's dispensatory. Colombo. of the plant which furnishes this root no botanical account has been given. It is said to be brought from Ceylon but from Cotta's accounts it appears to be the produce of Southern Africa. It is in round thin pieces evidently formed by transverse section of the root the circumference of these is covered by a bark

The woody part is of a light yellow colour
It has an aromatic smell and a bitter
taste it yields its bitterness to water but
proof spirits is its proper menstruum
though the tincture is not very strong
This is a native plant growing in the
western parts of the U. S. It is a very
important bitter. The taste is pungent
acrid and bitter somewhat aromatic
smell the roots come to us in wrinkled
pieces internally of a light yellow
colour. Its medicinal property is
a strong bitter It excites the pulse
the watery infusions are always pre-
ferred to alcoholic. It is used in
Dyspepsia. In Dysentery has lost
its high reputation. In cholera
infantum it is much used in the W.
Indies but quite an opposite treat-
ment is pursued in this country, not
giving it until the convalescent stage
It is conveniently given in powders
3ss. which in urgent cases may be
repeated every 3 or 4 hours. It is given
in infusion decoction and tincture
Quassia. Quassia excelsa Lignum.
W. Indies the wood of the root of this tree
is of a yellowish white when it has

A taste intensely bitter, without any odour or aromatic flavour the bitterness is extracted equally by water and alcohol. The name was derived from a negro doctor of

It is adapted to dull cases of Dyspepsia hysteria & Podagra the wood is given in a dose from 10 to 15 gr but better in a cold infusion form of infusion. ℞ Quassia ℥j
Water 1 quart
the dose is not precise a wine glass full may be given. **Augustura.** — **Bark**, a plant of the southern countries the bark comes to us in small pieces of a light yellow colour smell somewhat acid aromatic. It was by some practitioners placed equal to Peruvian bark. But this is not my opinion. Although experience in it is limited, you may give it in substance, in infusion & tincture. Dose of the powder a ℈j or ʒj —

Serpentaria Virginiana. Is a perennial plant a native of N America exclusively in addition to the three in a

diaphoretic. In this country (N. a.) it is extensively employed but we have to give it in increased action as it does excite the pulse is a slight stimulant. Is frequently combined with Peruvian bark, & given in intermittent Fever. In Typhus it is also much used combined with Per. Bark. I have used it freely myself but as a tonic rel alkali & bitter. Serpentaria as a stimulant. In Remittent fever is much used and in combination with Peruvian bark give in powder ℥ss to ℥j it is also given in infusion by decoction its active prop. ertly is in Baried. Pruriens Virginiana this grows in latitude 44° 29'. It is given in substance in infusion and decoction. The last is best. Dr Morris wrote an essay on it. vide those who have access to it, would do well to peruse it. It is given in Pulmonary consumption. I have used it with great success in (Pulmonary complaints) It is highly useful in hectic fever, but it has been to much used in these complaints

Anthemis Nobilis. Chamaemelum
Chamomile. Flos. The bitterness with
part of the odour is extracted by wa=
ter and alcohol and if the infusion
has been made with warm water it is
narcotic distilled with water the
flowers yield a small quantity of
essential oil. Chamomile is a pow=
erful bitter and as such is useful
in dyspepsia forming a popular
Remedy which is in common use.
When employed for this purpose it
ought to be under the form of cold
infusion which is most grateful. The
infusion in tepid water when strong acts as an
emetic and is often used to promote the action of
other emetics. In substance it has been given as
a remedy in intermittent fever in a dose of ½
3 j or 4 times a day. Externally the flowers steep=
ped in water are employed as a fomentation
The extract which is intensely bitter, is a convenient
vehicle for forming pills especially when it coin=
cides in value, with the substance prescribed in
the that form. It is frequently given as a diaa=
phoretic in warm water. It is an ancient remedy
in intermittent fever Century. So much used for
a tonic but in my opinion is far inferior to cham=
omile. Lecture 57 Cornus Florida is one from our country
producing. This is a very good tonic grows in latitude of
Dr Walker wrote a valuable thesis on Cornus florida
Cornus circinata. The dose is the same as Peruvian bark
and is said to be equal to it but I say the bark is preferable to it
cornus circinata cannot be procured in such quantities, as cornus Florida
therefore is not used. Eupatorium Perfoliatum. This I have always dry bolt

you has an emetic and diaphoretic property: it also acts as a tonic. I might mention many more but the course is so far advanced that time will not permit I must therefore refer you to Cullen and Murray Materia Medica. he mentioned many but thinks them far inferior to those already enumerated I now go on to speak of Mineral.

Tonics. of Ferrum. Iron. Nearly like all other metals in its metallic state is inert but when it is finely powdered is useful as a vermifuge. It acts mechanically. Chemistry with its industry with its industry has investigated its preparations

Carbonate of Iron. when this metal is exposed to a humid atmosphere, where the metal attracts the Oxygen of the air is oxidized and also combining with another portion of the air, carbonic acid which forms the salt, there are two carbonates, Carbonas Ferri precipitatus prepared by adding a solution of carbonate of soda to a solution of sulphate of Iron

washing and drying the precipitate formed by the chemical decomposition. But we shall consider the carbonate of Iron or Sulphate ferri which is superior average dose 5 to 10 grs It may be given in larger doses but but I prefer small doses its virtue is the same in small as in large doses Physicians are fond of formulas. It is therefore frequently combined with several bitters. and for the combinations I refer you to any dispensatory. I use it in the following manner in combination with bitters viz

I have sometimes added Rhubarb and ginger is a very useful addition

Sulphate of Iron. Sal martis (copperas) in large doses causes vomiting spasm &c. I have no hesitation to recommend it in combination with sulph ferri muriatic acid added to Iron fum

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chloride of Iron. this is employed in the form of tincture. It is prepared by dissolving black oxide of Iron in Muriatic acid and diluting the solution with alcohol. Tinctura Ferri Muriatis. is a very active preparation, sometimes too much so as to admit of its being used in an irritable state of the stomach. Its dose is 10 or 15 drops diluted with water or taken in wine the tonic quality of Iron has led to its use in intermittent fever particularly in combination with Peru. Bark. But in high excitement is prejudicial. In Chlorosis Glettre also much used in clear arrows of children. the formula which I have already mentioned is very good in this disease (clearanous) Dose proportionate to age. I have derived much benefit from this formula after purging the child several times. In Cancer Iron has been given and recommended by Dr Charmichael this is vague it has no effect on cancer

Dr Barton supposed it to enter the blood but this Dr Chapman opposes several graduates of this university also oppose it Dr Dorsey rather inclines to Bartons opinion. acetate is retained in the stomach as orange peel &c

Cuprum. copper. For its chemical preparations I refer you to the professor of chemistry. When copper is taken into the stomach which it sometimes is, it causes disagreeable symptoms. commonly you will find it vomited in 48 hours. but when an acidity exists in the stomach forms a neutral salt. as this some times causes bad symptoms, we should give no acid or acescent food. By doing this I have very seldom seen any bad effects result from it. but they have occurred. symptoms. exhausted vomiting of blood convulsions syncope and death. I have seen a child which swallowed a piece of Iron, and the Iron passed off in a short time. I once saw the anus lacerated by a piece of bone accidentally swallowed which passed per anu. Ptyalism some times takes place when copper has been taken. Dr Barton relates such a case.

the amoniuret of copper (ammoniatum cupri. cuprum ammoniatum. It is prepared by triturating sulphate of copper and carbonate of ammonia

together. and is either a ternary compound of copper (oxide) ammonia and sulphuric or a mixture of sulphate of ammonia and the compound of ammonia and oxide of copper. It has been much used in epilepsy. in cases where it has been employed no relief was obtained. I never used it freely myself and never saw it beneficial. Dose 1/12 gr gradually increased given 2 or 3 times per day. Dr Russell gave 18 grs 3 times per day. Dr Dicks recipe is as follows

℞ Flowers of Zinc ʒj
Cupr Ammoniuretum ℈j
Winter Bark ℥ss
Syrup — QS
Dose

Dose 1/3 of a grain cupram ammoniuretum. In large doses it acts as a emetic therefore use it in small doses as a tonic. In Chorea St Viti. It is used. I have used it in one case without advantage. Sulphate of copper has been recommended in Intermittent fever. formula in which it is given.

℞. Sulph cupri grs IV } Divided in 8 pills
Capsicum ʒss } pill thrice a day

I have used it in this formula. it produced nausea. Dr Chunn thought it useful when it nauseates. it is used in surgical cases. Dr Physick used it in this formula in sore throat, & I have used it myself and cured many

1549.

℞ Sulphate of copper ʒj.
Peru Bark ℥j } as a gargle.
2 or 4 quart

a solution is used as a collyrium in ophthalmia, when collyriums are urgent or indicated. It has been used as a tonic. I have never seen it used as a tonic. It used as an authentic which has been already mentioned.

Argentum. It considered a perfect metal. The only preparation we have of it is nitrate of silver. From making it

this is generally used as an escharotic but was once used as a tonic in epilepsy and is again revived. Some use it in epilepsy but without any benefit. Dose 1/8 of a grain in form of Bill you make a solution and mix it with crumb of bread and make a dough of it and form it into pills. In all your pharmaceutic preparations make it dose 1/8 or 1/4 of a grain. It has been given in larger doses. Nitrate of silver as an escharotic is much used it does not act internally as an escharotic but also as a tonic and stimulant.

Gold. I have very little to say of this metal Dr [illegible] has called the

attention of Physicians to one of its preparations he extols it in Syphilis &c and this is the Muriate of Gold. I have seen it tried as completely fail in this disease (syphilis) I would rather see a specific for cancer than the venereal disease as we have often cause for the latter disease which by proper use are cure Syphilis. Lu-cum. Lime. In its metal state has no effect on the human body. an oxide of it has been used in epilepsy &c Sulphate of Lime flowers of Lime like blue vitriol has an excess of acid. Dr Barton has used it in Epilepsy. in pertussis in mucheuse In Palpitation when it arises from Dyspepsia is useful. is given in Solution in the following manner.

While vitriol when combined with laudanum is much used as an injection in Gonorrhoea.
viz.

1581

℞ White vitriol. grs xx or xl.
i – ℥ss Pt of water
Laudanum is sometimes added

When irritation exists Hemiahromatopsia and strictures are the consequences, when to strong. It is not to be used until inflammatory action is subdued. this is applicable to all injections. Acetate of Zinc. this is formed by adding a solution of Sulphate of Zinc to a solution of acetate of Lead a precipitate is formed which is acetate of Zinc. a double decomposition takes place. the acetic acid unites to the Zinc and the sulphuric acid of the Zinc to the Lead My formula or an injection for Gonorrhoea is as follows

Acetate of Lead grs xl
Sulphate of Zinc. grs. 8
Aqua ——— oz. viij

This is to be used after the inflammatory action is subdued. Bismuth the oxyde of this metal is much used in Dyspepsia. Dr found it highly useful in Dyspepsia In this City is not much used. I have used it in one case with tolerable advantage 5 or 6 grs 2 or 3 times a day in syrup.

Lecture 51st

This is another Semi metal Oxygenizes it into an acid when heated a garlic odour is very perceptible and this is important in medical jurisprudence. It is soluble in water & changes vegetable blues it is easily converted into arsenious acid by adding a portion of Oxygen to it. I shall retain the term white oxide of arsenic. It is obtained from different metallic ores as cobalt nickel &c. taste acrid, and sparingly soluble in water in small doses of a few grains. I have seen it kill outright upon dissection the cardiac portion of the stomach was inflamed. Dr Physick has found the stomach gangrenous. Symptoms nausea burning sensation impeded respiration convulsions & death in violent terminations to prevent its bad effects, oils & emetics may be used as Tar, emetic Sulp Zinc. In France sulphuret of potash is used as an antidote but this is too feeble arsenic an

Externally applied to ulcers has caused such symptoms. When nausea occurs, you must resist from its external application. The preparations of arsenic are several, I shall only mention a few. The Dose of Arsenious Acid is 1/16 of a gr. Fowlers solution is made in the following manner

Dose 10 or 15 drops 3 or 4 times a day. for an adult gradually increased to a child 3 years old 3 drops. 4 years 4. 5 years 5 &c. Darrieus preparation has no preference to Fowlers solution, and the latter is more used

This medicine has latterly been used in intermittent fever. I have used it freely when peruvian bark has failed. There are many cases in which one is preferable Dr Barton remarks that arsenic is inadmissible

In Typhoid cases of intermittent fevers. It may be advantageously given in intermittent of children they will take Fowlers solution when the bark cannot be retained.
When the pulse is active and irregular I have found the arsenic useful. It does not stimulate and does not cause head ache. It puts a period to intermittent fevers in a short time. Peruvian bark cannot be given in the hot stage but Fowlers solution can. I have no doubt when it is given in large doses it may do harm in the hot stage. Hydrocyanical swelling will result from its long continued use but this is rare. It is a tonic and there is no proof that it has no tonic effect that it is a tonic there can be no doubt a great many prejudices exist against its use, and it is therefore sometimes necessary to conceal the name of it in our administration, and I am sorry that this prejudice has extended to Physicians. In Periodical headache it is useful as well as bitters. In Rheumatism Dr Barton Hosting

Bear in the habit of using it and recommends it highly. In Hemorrhagy it has been used but but I think it not adapted to this disease. In Chorea St Vitus and Asthma it is used but I think without advantage I suspect it is used as you have already been told by the Professor of Surgery. In Eruptions resembling venereal eruptions it is thought serviceable. In cancer it is used both externally and internally. It is an ingredient of several nostrums for this terrible complaint, but I think it not possessed of so great encomiums bestowed upon it in this disease. I advise you to read Sir Everard Home on the subject before you use it. In cancer of the uterus I have used it in vain. I might mention many more cases in which it has been tried but our time will not permit. I proceed to speak of Sulphuric Acid. This is a valuable tonic mild in its operation, may be taken in water (which is its proper vehicle) about 20 or 30 drops to 1 pt water. Elixir of Vitriol is made in the following manner

This is generally made in this manner

This is preferred to the acid as it is more agreeable. If you use the sulphuric acid if it be very strong 2 or 3 drops will be sufficient to 3 pint water. This acid is used in many cases of debility. It is said, to restrain diaphoresis. In Epilepsy it is used but without advantage. An Ointment is made of it which is much used for Psora. This is made as follows

Nitric Acid. It is made from of Mucilage Nitric acid ℥i
Solu. of G. Arab — ℥vi always
make it second dum actum. i.e. from
Nitric acid on the Mucilage 9

Not in the Q. Adelice. Is used in jaundice. Hepatitis &c. in the west indies, is used as a tonic in some cases of venereal. It was used and highly extolled in syphilis Dr Smith (a graduate of this college) of Charleston S. C. made it the subject of his inaugural essay where he adduces a number of experiments, vide his thesis. He places it on the same footing as mercury in syphilis. But this is certainly erroneous. It is now found to be inefficacious in syphilis in which case it has been so highly recommended. Muriatic acid. Its properties are analogous to nitric acid. & used in the same diseases as jaundice &c. in which the latter is used we pass on to speak of astringents in the language of Cullen. Astringents are those medicines which when applied to the human body produce a contraction and condensation of the soft solids & thereby increase their density & force of cohesion. If they are applied to longitudinal fibres the contraction is made in length, but if applied to circular fibres they diminish their diameters of the vessels which the fibres surround. Dr Cullen exemplifies the action of astringents to the tannin of leather & must however be evident that de

An analogy between living and dead is sufficient. Astringents do not chemically act on living matter by making an impression on the stomach. We check hemorrhagy of different parts of the system we have abundant proofs that they have no effect of putting a stop to hemorrhagy in distinct parts as the uterus lungs nose in its times &c. Sacch Saturni has this power in a short time. they cannot be absorbed for such a quantity as one tale of lead tab into the circulation could not have this effect in so short a period. this must be evident to all medical men astringents are styptics and tonics they are used in intermittent fever some writers have denied the existence of astringents they say astringents are tonics if those fer them will give proof that tonics will suppress hemorrhages then we will allow them under the class tonics but this is not the case tonics instead of suppressing hemorrhagy will increase the discharge of blood by increasing the vascular system.

Tannin Principle. the bit of this principle is gelatine. (forms leather) this principle is often united to bitterness In the Logwood the astringent principle is united to the Logwood (saccharine) I shall next speak of the individual astringents. all astringents are bitter

Lecture 61st

I shall follow the course of my predecessors in commencing to speak of the individual articles.

Extract of Catechu. this is obtained from a plant a species of ~~catechu~~ acacia. the extract is obtained by boiling and evaporating it is a gum resin, leaves an astringent taste in the mouth. It strikes a black colour with the salts of Iron. contains an earthy substance I am in the habit of using it in ulcers (as bulbous ulcers of &c) & by internal administration I have had much experience Dr Baiter used it in intermittent fever in combination with Colombo dose 15 a 20 gr rolled up with syrup. in England tis much used in —

Sponge gums, analogous to its prop=
=erties we have Kino. Dr Hodgkin
speaks of it as a new gum he is
sound to issue from a tree.

The term Kino is generally retained
Dr Murray's work & Pharmacopoeia
work probably is in the hands of
you all speaks of it (vide) Kino
of S. Holland, is similar to that
from Africa the analysis of Kino
is not different from catechu Dose
1 or 2 to 3 drachms in the course of the
day. Suspend it in mucilaginous
mixtures. It also give in tincture
in Intermittents Dr Barton used
it with success where peruvian bark
&c failed. It is also given in atonic
hemorrhages. In Gonorrhoea is given
as an injection but it is generally given
in in two large doses. In Diarrhoea
is generally in this city and I use it in
the following prescription —

℞ Cretæ Preparata — ℥ss
Succi Kino — ℥ss
Mucil. Mimosæ nilotica — ℥VI.
Laudanum — gutta — ℥X. 160

} Cinnamon a small quantity. Rubis Gala of a large dry ℥ss. a table spoonful every 2 hours.

In Pyrosis Dr. used it and speaks highly of it. In Diabetes he also gave it in combination with Op.

Kino 5 grs.
Opium 1/2 gr.

Quercus. the species of Oak are numerous the bark of all of them is astringent the black Oak is said to have the least astringent power Dose ℥ss to ℥i. the Oak bark is used in cynanche as a gargle. In Fetid c. strong decoction is very beneficial

Galls. an excrescence of oak and is said to be caused by a deposite of an insect's eggs of the cynosphinid the heavier they are the better. all Spo kind are the best. an infusion changes vegetable blues, to a red. owing to the gallic acid. Is used in all cases in which the Peruvian bark is used in intermittent fever I never used it — always used other remedies. In Dysentery is used I give it in the following manner that is when astringents are indicated. ℞ Pulv Galls — ℥i
a little cinnamon boiled in ℔ss of boiling to ℔i when Diarrhoea chronic form, this is a valuable remedy.

In Hemorrhoidal affections is generally made into an Ointment which is a popular remedy. It also used in Prolapsus Ani. In Gleet is also used

Lignum Campechianum. Logwood. this is much used in Dysentery (particularly of children)

Geranium Maculatum. grows throughout the U. S. used in bowel complaints cholera and Dysentery it is generally given in decoction with milk

Black Alder. the bark is said by Dr Maize to be useful in gangrene may be used in intermittent fever in Herpetic eruptions

Dewberry Root. this is an article much used by Dr Chapman every part of this plant is active in giving the following manner in cholera infantum. ℞ of quince root to 1 ℔ water dose a table spoonfull. In Dysentery & Diarrhoea is also used. Is an astringent but I think it not so powerful

Uva Ursi

We go on to speak of Mineral astringents. Iron. in a metallic state or Steel remains is void of astringent power. a proof of its astringency is evident in its retaining bowels even after but this might be owing to its tonic power. I find it difficult to say how it operates / probably meets with some acid in the alimentary canal when it checks Leucorrhoea. it may be considered as an astringent.
Copper. several of its preparations are used as a collyrium. As blue vitriol the lactic preparation is much used, as a collyrium in Ophthalmia.
Silver. I do not know that any of its preparations have any astringent power. Lincum. Lic. is much used

As an astringent (its preparations) as collyrium. Plumbum. Lead in its metallic state is not used as a medicine. Its preparations are extensively employed. Acetate of Lead. This is frequently employed as an astringent in many cases. External application is often made of a lead water poultice - as a collyrium. Internally. It is much used. Persons employed in the manufacturing of this metal are sallow & pale and are subject to a disease called colica Pictonum. In lead mines painters glazing and Printing stereotypers & apothecaries &c are frequently affected with this disease owing to their working with it. Gentlemen it is not however to be considered that colica Pictonum cannot be caused without lead being its remote cause. — Copper Antimony &c sometimes the remote cause when taken in large quantities into the stomach produces pernicious consequences hopeley that cause a vomiting &c come on and the stomach eject it. Probably the best method of preventing or lessening the effects is to give an emetic & evacuate the bowels, with a cathartic. Olleum ricini will answer very well

Lecture 3

The primary effect of Lead on the system is said to be stimulant. Dr Lind who made experiments on the Pharmacy with lead, and he found it increased the consequently it is a stimulant. Dose common dose is from 2 to 8 gr but the dose has been increased to 3j without inconvenience. Dr Barton gave the medicine in obstinate intermittents with success in cases where Peruvian bark, arsenic &c failed. In those cases in which I used it, it had no effect. I do not think much of it in intermittents. In Epilepsy it has long been used. It is said to be beneficial especially in young people. It must be continued long, whether it is useful I cannot say. I now use it. In Pertussis it has been used in europe but it does no good. Has been recommended in tetanus must act by inducing a new discase. Opium & the Diffusible stimulants are the best remedies in this disease. In chorea it has again & again been used, but without success. The same remark is applicable to Melancholia. In Bowel complaints. It is used as an astringent & sedative. In inflamed parts internally it is found of great service. But it is not ascertained, whether it acts in this manner on the inflamed surface of the stomach or bowels, in those cases in which I have seen it used with this intention no good resulted

As it will cause a disease called Colica Pictonum I think it injurious. Sugar of Lead is indirectly a sedative Dr Barton tries it in cholera Morbus but never entertained the practice & Leucorrhoea & gonorrhoea in form of injection In Hemorrhages. It has been usually supposed to be a specific but this is not the fact applied directly to the open mouths of vessels, & internally in those hemorrhages, where the pulse continues active not withstanding bleeding. It is & has been given in Epistaxis Hemoptysis, Hematemesis, & hemorrhages of other parts as uterine hemorrhage &c with good effect. The dose is about 3 grains, at short intervals the same has been increased to 8 or 10 grs Dr Barton recommends 1/2 gr of Opi. to be combined with it also Ipecacuanha. An unguentum is made of Acetate of Lead which is much used. White Lead Cerussa sub acetate of Lead. is made into an ointment which relieves pain & inflammation I have seen it used in burning fever Dr Rush's application was inefficient, with success. It made as follows.

Cerussa
Liquid Laudanum
hogs Lard
Bees wax

In hemorrhoids this ointment is much used & I have used it with great success. Sulphas aluminis. the astringency is manifest by taste that it was too irritating & laid it aside Dr Dewees thought it was adapted to bowel complaints. In cholera Morbus tis combined with Laudanum. In hemorrhages is much used Dr Thomson gave it in large doses.

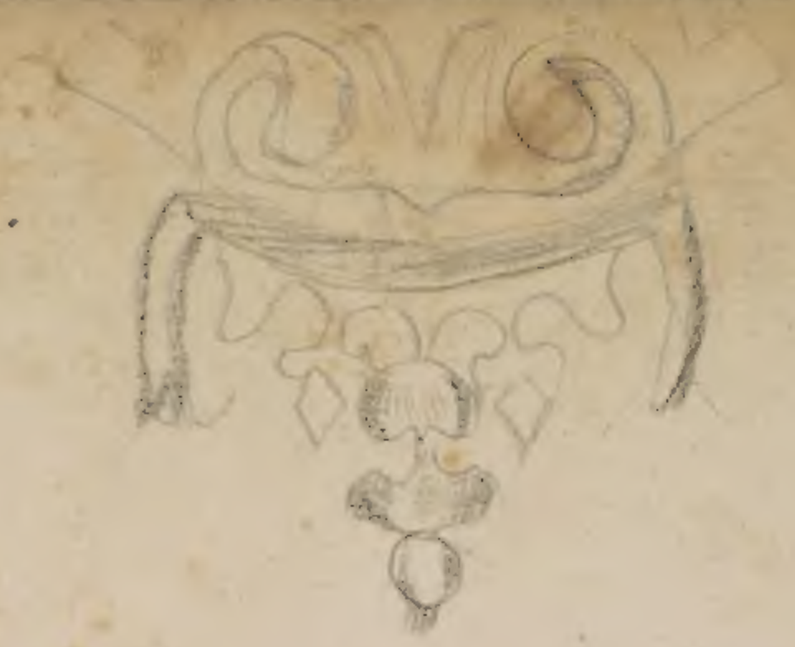
In leucorrhoea used, form an useful astringent in Gonorrhoea. as a collyrium is often used you use alum. I have already mentioned it the burning of Lobsarotics. Creta Preparata. carbonate of lime. pure lime is used as an astringent the cretaceous mixture is much used in bowel complaints & is useful in Diarrhoea it restrains it In Dysentery we use the medicine but not before the bile is evacuated then it is beneficial

the Formula. ℞ Prepared chalk ℥ss } to be given
this is made into Opium — — 4 grs } every
8 powders one one Ipecac. — 4 grs } 3 or 4 hours
a child from 5 to 8 years - In the quantity
chalk Julep. is made as follows

Muriate of Lime & Baryta. In scrofula & many other diseases is much used. all the experience I have had leads me to say that we have no other medicine for the dreadful disease. which invades our unhappy citizens happy would it be for the medical art to have a specific for this disease (scrofula &c)

Valedictory address.

Finis



MATERIA

MEDICA

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